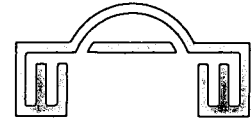

THE INVESTOR-OWNED HOSPITAL MOVEMENT IN NORTH CAROLINA

A Report by The North Carolina Center for Public Policy Research



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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*; the production of a symposium or seminar each year; 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 integrity of scholarly research with the readability of good journalism. Each Center publication represents an effort to amplify conflicting views on the subject under study and to reach conclusions based on a 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.

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THE INVESTOR-OWNED HOSPITAL MOVEMENT IN NORTH CAROLINA

Edited
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Staff members and interns of the N.C. Center have talked with representatives of all of the hospitals in North Carolina that are owned by, leased to, or managed by an investor-owned corporation — either in a personal interview or over the telephone. Center representatives have talked with employees of the investor-owned corporations in regional and home offices all across the country. The Center has also talked with many public and not-for-profit hospital representatives as well. Almost without exception, hospital and corporate representatives have welcomed the Center and provided information that has been crucial to this research. Without this assistance, the Center's efforts would require much more time and expense, and the research results would be much less complete.

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Center staff members Jim Bryan and Ran Coble worked long hours in developing the research design and in conducting interviews across the state. Nancy Rose, Wyounda Haynes, and Marianne Kersey have provided great assistance in producing the manuscript. Jack Betts served as copy editor and provided valuable help in fine tuning the manuscript. Carol Majors' talents and hard work as production coordinator have produced an attractive and easy-to-use report.

Two volunteers have provided valuable assistance, as well. Maria Long has spent several hours as a typist and as a proof reader. Rodney Maddox spent many evenings and weekends proof reading and photocopying. The Center gratefully acknowledges their contributions.



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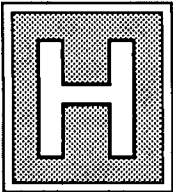
Note — The hospital industry in North Carolina is changing. One indication of this is that since the authors completed their final drafts, the N.C. Center has learned of changes in ownership and management in the following North Carolina hospitals:

- Alamance County Hospital (ACH) and Memorial Hospital of Alamance County (MHAC)** merged and are now owned by the not-for-profit Alamance Health Services Inc. MHAC had a new name — Alamance Memorial Hospital. SunHealth, Inc. continues to manage both hospitals.
- Bertie County Memorial Hospital** in Windsor, a county-owned general hospital, is now leased by the investor-owned Westworld Community Healthcare Inc. The hospital had been managed by SunAlliance up until the hospital closed in July 1985. The county reopened the hospital two months later upon entering a management contract with the investor-owned Forum Health Investors (FHI). Westworld replaced FHI in February 1986.
- CPC Cedar Springs Hospital**, a psychiatric and chemical dependency hospital for adolescents, opened October 14, 1985 in Mecklenburg County, and is owned and managed by the investor-owned Community Psychiatric Centers of Santa Anna, California.
- Cape Fear Valley Hospital** in Fayetteville, a county-owned general hospital, changed its management contract from the investor-owned National Medical Enterprises, Inc. to the not-for-profit SunHealth, Inc.
- Charter Pines Hospital** in Charlotte, a new psychiatric facility owned by Charter Medical Corporation, opened.
- Edgecombe General Hospital** in Tarboro, a general hospital owned by Hospital Corporation of America, has changed its name to Heritage Hospital and has built a new replacement facility.
- Fletcher Hospital** in Henderson County changed its name to Park Ridge Hospital. The not-for-profit Adventist Health Systems/Sunbelt Health Care Corporation continues to manage it.
- Gordon Crowell Hospital** in Lincolnton, owned by American Medical International, closed.
- Hugh Chatham Memorial Hospital** in Elkin, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Huntersville Hospital** in Mecklenburg County, a county-owned general hospital, closed.
- L. Richardson Memorial Hospital** in Greensboro, a not-for-profit hospital, changed its management contract from the not-for-profit SunAlliance to Hospital Corporation of America.
- Lowrance Memorial Hospital** in Mooresville was purchased from Iredell County by the investor-owned Hospital Management Associates. The general hospital had been managed under contract by Hospital Corporation of America.
- Rutherford Hospital** in Rutherfordton, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Warren General Hospital** in Warrenton, a county-owned general hospital, closed.
- Wayne County Memorial Hospital** in Goldsboro went from county-owned and operated status to a not-for-profit corporation-owned and operated status. On October 1, 1985, the hospital officially reorganized into the Wayne Memorial Hospital, Inc.

Changes in the text and tables have not been made to reflect these changes. These changes will be reflected in subsequent research and published reports.

— Editor

EXECUTIVE SUMMARY



This report is the first of a series of three reports on investor-owned hospitals in North Carolina to be published by the North Carolina Center for Public Policy Research. Since 1980, the number of investor-owned hospitals in North Carolina

has increased dramatically. The recent rapid growth in the number of hospitals owned by, leased to, or managed by investor-owned corporations represents a significant new direction in health care in the state and is a public policy issue which merits objective study and analysis. The Center's goal is to describe and analyze the impact on health care of the movement toward for-profit hospitals in North Carolina.

The Center initiated this study because this movement is a significant development in the health care industry and because there is so little research available in the area. This first report represents an overview of the issues raised by for-profit involvement in the hospital industry. It contains individual profiles of each of the 38 hospitals owned or managed by the 11 investor-owned multi-hospital systems operating in the state. In addition, this report identifies some of the possible factors leading to the acceleration of investor-owned involvement in North Carolina. Finally, the report examines several other components of the health care industry which are relatively new to the state but fast growing, and which may affect the viability of the state's community hospitals.

The National Investor-Owned Trend: A Description and Discussion of Its Good and Bad Aspects

Since World War II, most hospitals in this country have been locally-owned not-for-profit or public facilities. Two interrelated structural changes are rapidly redefining the traditional patterns of hospital ownership and management. First, the proprietary or for-profit sector has taken an increasingly active role within the health care industry. Second, there is a growing tendency for independently-owned hospitals to enter into multi-institutional arrangements. While neither of these structural forms is new, the speed with which hospitals are joining multi-hospital systems merits attention.

This study provides an introduction into the type of hospital ownership and management prevalent in the United States and in North Carolina today. It also contains statistical summaries of hospital ownership patterns over the past thirty years demonstrating the growing significance of multi-hospital systems and the for-profit sector in the American health care industry.

Types of Hospital Ownership. Hospital ownership can be classified into three broadly-defined categories: (1) public; (2) not-for-profit (both secular and religious — also called voluntary); and (3) investor-owned (also called for-profit or proprietary).

Public hospitals include facilities owned by federal, state, or local governmental units. In this report, the term "public hospital" refers specifically to those owned by state or local governmental bodies. The majority of the nation's public hospitals are community-based and are owned by counties, cities, local or regional hospital districts, or special hospital authorities. Local public hospitals are usually general, acute-care facilities that provide a broad range of health care services.

Public hospitals are an important source of health services for the poor, the unemployed, and other dependent groups. They provide opportunities for medical research and education, particularly within the large regional and teaching hospitals like the state-owned N.C. Memorial Hospital in Chapel Hill. Public hospitals often offer specialized services not available elsewhere in the health care system.

Not-for-profit hospitals (secular or religious) are privately owned and operated as charitable, community service organizations. They are tax exempt. Not-for-profit hospitals are sometimes referred to as "voluntary" or nonprofit hospitals. This report, like most literature on the subject, uses the terms interchangeably. Rex Hospital in Raleigh and Moses H. Cone Memorial Hospital in Greensboro are examples of not-for-profit hospitals in North Carolina.

Investor-owned hospitals are also privately owned; however they are not tax-exempt. The major distinction between investor-owned hospitals and other types of hospital ownership is profit orientation. The investor-owned hospital seeks to earn a profit for its shareholders in addition to providing community health care services. Hence, investor-owned hospitals are often referred to as "proprietary" or "for-profit." Central Carolina Hospital in Sanford and Davis Community Hospital in Statesville are examples of investor-owned hospitals in North Carolina.

Hospital Ownership Patterns. Despite the growth in the number of public hospitals during the 30 years following World War II, the percentage of total beds in public facilities actually declined. By 1975, the number of beds in public hospitals was 215,000, an absolute increase of 62 percent over 1946 totals. However, this represented a decline (to 23 percent) in the percentage of beds under public sponsorship. Meanwhile, not-for-profit and investor-owned facilities accounted for 70 percent and 8 percent of the 1975 totals, respectively.

Since 1975, the number of investor-owned hospitals in the United States has increased dramatically. The Federation of American Hospitals stated that between 1977 and 1982 there was a 43 percent increase in the number of beds owned by the

investor-owned hospital sector. This growth in investor-owned hospitals has not been limited to general hospital facilities. In fact, in 1980, while over 15 percent of all general acute care hospitals were investor-owned, the proprietary sector owned 50 percent of the nation's psychiatric hospitals.

Multi-Hospital Systems — A Definition. A multi-hospital system consists of a group of hospitals with common ownership or management. Any hospital owned, operated, or managed by an organization that owns, operates, or manages two or more hospitals is part of a multi-hospital system. The organization that owns, operates or manages such a system generally is called a hospital management company. The most active investor-owned hospital management company in North Carolina is Hospital Corporation of America based in Nashville, Tennessee. Like individual hospitals, hospital management companies can be public, not-for-profit, or investor-owned.

Advantages and Disadvantages of Investor-Ownership of Hospitals. As a result of interviews conducted during research on investor-owned hospitals in North Carolina, a number of advantages and disadvantages of this type of hospital ownership and management have been suggested to the Center. This report discusses each in turn.

A. Possible Advantages

1. *Access to private capital.* First, the major advantage investor-ownership or management contracts may offer is access to private capital that can be used to repair a hospital building or to replace an old facility with a new one. Harrison Ferris, administrator of the Hospital Corporation of America-owned Raleigh Community Hospital said that capital formation is an important advantage. "Profit is the cost of doing business tomorrow," Ferris said.

2. *Access to a national personnel pool.* Second, investor-owned corporations may use their national systems to develop a pool of qualified personnel, particularly hospital administrators.

3. *Management expertise.* Third, related to this is the advantage of management expertise. The skills required to be a good county commissioner or a good doctor are not necessarily the same skills that would guarantee a well-run hospital providing quality medical care at a reasonable cost in an up-to-date facility which doesn't lose money.

4. *Volume purchasing.* Fourth, any multi-institutional system has the advantage of saving money through large-volume purchases of basic medical necessities such as intravenous solutions. A single hospital usually cannot approach the buying power of an investor-owned corporation.

5. *Promoting competition in the hospital sector.* The fifth possible advantage is that the presence of investor-owned hospitals in a community may increase competition in the health care sector generally.

6. *Tax advantages.* The sixth advantage is that if the hospital changes from a county-owned or other public facility to an investor-owned facility, it may also change from being tax-supported to being a taxpayer, simply because investor-owned hospitals are subject to local property taxes and corporate income tax levies.

7. *Taking the county out of the hospital business.* The final apparent advantage applies only to situations where the hospital is county- or city-owned. County commissioners who turned over a county-owned facility that had been losing money to a private company frequently say a burden has been lifted from their shoulders.

B. Possible Disadvantages

1. *Investor-owned hospitals may have higher charges.* The chief possible disadvantage of investor-owned hospitals is that they may have higher charges. In January 1984, Blue Cross-Blue Shield of North Carolina released a study of average charges to Blue Cross subscribers in 1981-82 for three procedures in North Carolina acute care hospitals that were owned by investor-owned chains and which had enough cases to provide valid charge data. The study found that charges were higher in six investor-owned hospitals than for other hospitals of similar size in North Carolina.

2. *Indigent care.* The other major concern expressed about hospitals affiliated with investor-owned corporations is whether they provide less indigent care than do not-for-profit hospitals.

3. *Skimming the cream.* A third possible disadvantage of investor-owned operations is that hospitals affiliated with investor-owned corporations may narrow the range of services or alter the patient mix to the extent that investor-owned hospitals get more of the *paying* patients — leaving fewer revenue-producing patients or services for not-for-profit hospitals. The Center is researching this question for our second report in several ways: Are there any requirements for deposits upon admission that would tend to discourage patients without insurance? What is the range of services offered in a hospital, and which ones are the revenue-winners (like out-patient surgery or radiology departments) compared with revenue-losing services (like obstetrics or emergency room care)?

4. *Changing the nature of health care.* Just as there is a political factor that may be an advantage of investor-owned corporations, there is a philosophical factor that is sometimes suggested as a disadvantage. This can be best expressed as a question of whether profit considerations properly

belong in the delivery of hospital care. At this point, research questions end, and the discussion shifts to individual views about who has the responsibility for delivery of health care in a democratic society.

North Carolina Hospitals

This report contains summary data on the 164 non-federal hospitals in North Carolina (both general acute care and specialty hospitals) and includes information on the activities of multi-hospital systems in North Carolina.

Location. The state's 164 non-federal hospitals are located in 85 of the state's 100 counties. No hospitals are located in the remaining 15 counties situated primarily along the more sparsely populated coastline.

Ownership. (A) *Public.* Excluding the nine federal facilities in the state, North Carolina has 77 public hospitals. Of these 77, 11 are owned and operated by the state, 55 by counties, six by specially created hospital authorities, two by cities, two by hospital districts, and one by a township. Wilkes General Hospital in North Wilkesboro is an example of a publicly-owned facility.

Of the 55 county-owned facilities, only eight are county operated. Thirty-nine are managed by not-for-profit corporations created solely for the purpose of hospital management or by the multi-institutional, not-for-profit company called SunHealth, Inc. Two county hospitals are managed by hospital authorities, and five are operated under management contracts by investor-owned corporations. The remaining county-owned facility is leased to an investor-owned corporation which exercises complete control over the facility.

Of the 11 facilities owned by other local governmental units, eight are operated by not-for-profit corporations and three by the owner of the facility.

(B) *Not-For-Profit.* Sixty-one of North Carolina's hospitals are owned by not-for-profit corporations. An example of a not-for-profit hospital is Presbyterian Hospital in Charlotte. Forty-nine of these hospitals (80%) are managed by the corporation that owns the facility. Eleven are part of the SunHealth Network or of SunAlliance — management corporations owned by the not-for-profit SunHealth, Inc. based in Charlotte. One facility is run by the not-for-profit Adventist Health Systems/Sunbelt Health Care Corporation of Orlando, Florida. Investor-owned corporations manage six hospitals owned by local, independent, not-for-profit corporations.

(C) *Investor-Owned.* Of the state's 40 hospitals operated on a for-profit basis, 26 are investor-owned and operated, 13 are *managed* under contract by an investor-owned multi-hospital system, and one is operated under a *lease* arrangement by an investor-

INVESTOR-OWNED INVOLVEMENT

Name	Location	Number Beds	Type	Owned/ Managed	Date
<i>A. Owned by Investor-Owned Corporations</i>					
1. Hickory Memorial	Hickory	47	P	O-UMC	1979
2. Frye Regional Medical Center	Hickory	218	G	O-AMI	1974
3. Davis Memorial	Statesville	167	G	O-HCA	1983
4. Humana Hospital	Greensboro	100	G	O-Humana	1977
5. Central Carolina	Sanford	142	G	O-AMI	1980
6. Highsmith-Rainey	Fayetteville	95	G	O-HCA	1983
7. Raleigh Community	Raleigh	140	G	O-HCA	1977
8. Community Hospital of Rocky Mount	Rocky Mount	50	G	O-AMI	1981
9. Edgecombe General	Tarboro	127	G	O-HCA	1982
10. Highland	Asheville	125	P	O-PIA	1981
11. Appalachian Hall	Asheville	100	P	O-PIA	1981
12. Orthopaedic Hospital	Charlotte	166	S	O-HCA	1982
13. Charlotte EE&T	Charlotte	68	S	O-Humana	1981
14. Mandala Center	Winston-Salem	75	P	O-CMC	1981
15. Charter Hills	Greensboro	100	P	O-CMC	1981
16. McPherson	Durham	32	S	O-Ind	1926
17. HSA Cumberland	Fayetteville	154	P	O-HSA	1983
18. Life Center of Fayetteville	Fayetteville	34	P	O-HSA	1984
19. Holly Hill	Raleigh	58	P	O-HCA	1981
20. Brynn Marr Treatment Center	Jacksonville	34	P	O-HSA	1983
21. Life Center of Jacksonville	Jacksonville	47	P	O-HSA	1984
22. Life Center of Wilmington	Wilmington	27	P	O-HSA	1984
23. Charter Northridge	Raleigh	66	P	O-CMC	1984
24. Blackwelder Memorial	Lenoir	31	G	O-HCMC	1985
25. Charter Pines	Charlotte	60	P	O-CMC	1985
26. Medical Park	Winston-Salem	136	G	O-Ind/M-HCA ¹	1985

B. Managed by Investor-Owned Corporations

27. Angel Community	Franklin	81	G	M-HCA	1983
28. Spruce Pine Community	Spruce Pine	88	G	M-HCA ²	1982
29. Burnsville Hospital	Burnsville	24	G	M-HCA	1982
30. The McDowell Hospital	Marion	62	G	M-Delta	1982
31. Ashe Memorial	Jefferson	76	G	M-HCA	1981
32. Person County	Roxboro	88	G	M-HCA	1981
33. Cape Fear Valley	Fayetteville	473	G	M-NME	1982
34. Johnston Memorial	Smithfield	180	G	M-HCA	1982
35. Franklin Memorial	Louisburg	76	G	M-HCA	1983
36. Lowrance Hospital	Mooreville	121	G	M-HCA	1983
37. Morehead Memorial	Eden	133	G	M-HMP	1984
38. Rutherford Hospital	Rutherfordton	165	G	M-HMP	1985
39. Hugh Chatham Memorial	Elkin	96	G	M-HMP	1985
40. Brunswick County	Supply	60	G	L-HCA	1981

Full names for the corporations listed above are as follows:

AMI ... American Medical International
 CMC/Charter ... Charter Medical Corporation
 Delta ... The Delta Group, Inc.
 HCA ... Hospital Corporation of America
 HMP ... Hospital Management Professionals
 HCMC ... Health Care Management Corp.

* HSA ... Healthcare Services of America
 * Humana ... Humana, Inc.
 * NME ... National Medical Enterprises, Inc.
 * PIA ... Psychiatric Institutes of America
 * UMC ... United Medical Corporation
 * Ind ... Independently owned,
 not affiliated with a chain

G — General hospital (primarily)
 P — Psychiatric
 S — Specialty
 O — Owned
 M — Managed
 L — Leased

¹Medical Park Hospital is an investor-owned hospital that is also managed by an investor-owned hospital management company, Hospital Corporation of America.

²Spruce Pine Community Hospital and Burnsville Hospital are the only hospitals in the Blue Ridge Hospital System, which is managed under contract by HCA.

owned system. Of the 26 investor-owned and operated hospitals, two are independent, doctor-owned facilities. One is managed by the owning physicians, while the other is operated under a management contract by an investor-owned multi-hospital system. Twenty four hospitals are owned and operated by investor-owned multi-hospital corporations.

Types of Services. One hundred thirty of North Carolina's 164 non-federal hospitals are general, acute care facilities. The remaining 34 provide a broad range of specialty care. Fourteen are psychiatric hospitals. Ten specialize in the treatment of alcohol or chemical dependency. The others include four rehabilitation hospitals; two eye, ear, nose and throat hospitals; one cancer institute; one orthopedic hospital; and two prison hospitals.

Size. The size of North Carolina's hospitals ranges from a low of 12 beds to a high of 946 beds. Seventy-three of the state's 164 non-federal hospitals, or 45 percent, have fewer than 100 beds and are considered small hospitals. Seventy-one of the 164, or 43 percent, are medium-sized hospitals with between 100-399 beds. The twenty remaining non-federal hospitals have 400 or more beds each and are considered to be large hospitals.

Multi-Hospital Systems in North Carolina. Seventy-one of the state's 164 non-federal hospitals are affiliated with a multi-hospital system. Thirty-one of the 71 are owned and operated by a multi-hospital system while 40 are managed under contract by a multi-hospital system.

Two public multi-hospital systems are active in the state. Five hospitals are operated by the Wake County Hospital System and four others are part of the Charlotte-Mecklenburg Hospital Authority System.

Three private not-for-profit multi-hospital systems also operate in North Carolina. The Sisters of Mercy system owns and operates two hospitals. A second, SunHealth, Inc. is a parent holding company with several wholly-owned subsidiaries. One of these subsidiaries manages hospitals under contract — SunAlliance, which manages small and medium hospitals. SunHealth Network offers management consulting to large hospitals. SunHealth, Inc. leases one hospital in North Carolina. SunAlliance manages 17 hospitals. SunHealth Network serves another six. A third not-for-profit company, Adventist Health Systems/Sunbelt Health Care Corporation, manages one North Carolina hospital.

Eleven investor-owned multi-hospital systems currently are active in the state, owning and operating or managing under contract a total of 37 hospitals. Only one of these eleven systems — Hospital Corporation of America (HCA) — both owns and manages hospitals in North Carolina. Seven systems operate in the state only as hospital

owners and operators. Three investor-owned systems are engaged exclusively as hospital managers.

Factors Affecting the Changeover to Investor-Ownership

Many experts in the area of hospital management believe that each community hospital will eventually be faced with the decision to join, or sell to, a multi-institutional arrangement. They further conclude that the option to remain unaffiliated can be preserved through careful planning.

The rapid expansion of the investor-owned segment of the nation's hospital industry over the last ten years has led observers to speculate as to the factors underlying the growth. Hospitals have had to cope with regulatory controls, competition from other health care providers, capital funding problems, political pressures, the growth of the elderly population, more expensive technology, cash flow problems, updating aging facilities, changes in Medicare payments — and the list could go on. Ownership by an investor-owned hospital management company can help solve some of these problems. Gary Whitener, chairman of the Board of the Catawba County Commissioners said in a 1984 interview that competition between the county-owned Catawba Memorial Hospital and the investor-owned Frye Regional Medical Center, both in Hickory, had been beneficial. "Competition is good and there is a place for competition in health care," Whitener said.

Possible Reasons for North Carolina's Hospitals to Join Investor-Owned Systems. Many experts believe that hospitals have been joining investor-owned multi-hospital systems with increased frequency in order to resolve many of the problems mentioned above.

This series of three reports by the N.C. Center on the investor-owned hospital movement in the state examines the pros and cons of investor-owned multi-hospital systems. The second and third reports will complete this task more thoroughly than this report, which is primarily an introduction to the North Carolina hospital industry. However, in this first report, the Center examines two hypotheses which were suggested in interviews as possible reasons for the state's hospitals to join investor-owned multi-hospital systems. As part of its research, the Center tested these two hypotheses:

Hypothesis 1: Public hospitals are more likely to join investor-owned hospital systems than are not-for-profit or independent proprietary hospitals.

Finding 1: Thus far, this has not been true in North Carolina. However, future sales to investor-owned systems would have to come from not-for-profit and public hospitals because there is only

one remaining independent, for-profit hospital in North Carolina.

Hypothesis 2: A public or not-for-profit hospital's decision to join an investor-owned system frequently follows the defeat of a local hospital bond referendum.

Finding 2: Not true. Based on available evidence, it appears that no significant relationship exists between these two events. From 1970 through the first quarter of 1983, only one public hospital (Lee County Hospital) was sold to an investor-owned corporation after the defeat of a local hospital bond referendum.

Competition: Other Actors on the Health Care Stage

The traditional hospital has been likened to a bleeding porpoise surrounded by hungry sharks. The sharks are freestanding ambulatory surgery centers, urgent care centers, diagnostic centers, changes in reimbursement and physician practice, and a plethora of other new facilities competing with the traditional general hospital. Some health care experts believe that the very existence of many hospitals will be threatened as these competitors turn one hospital profit center after another into a money loser. "If you pull out the parts of the hospital that are profitable," said John Young, a staff researcher with the N.C. General Assembly, "the hospital will be unable to stay afloat...The hospital system as we know it will fly apart."

In this report the Center has also examined, in greater detail, three of the rapidly growing segments of the health care industry that are competing with the traditional general hospital in North Carolina — Ambulatory Surgery Centers,

Health Maintenance Organizations (HMOs), and Urgent Care Centers. (See Chapter IV, sections 1, 2, and 3.)

As a result of many factors, hospital use is plummeting. In North Carolina, an estimated 10,000 of 25,500 hospital beds are empty. The decline in hospital use has been sharp, according to Blue Cross and Blue Shield of North Carolina. Since 1981, patient days per 1000 subscribers have dropped 22 percent.

Many factors account for the sudden success in changing the habits of practicing physicians. One is the federal Medicare program and its switch to payment by Diagnosis Related Groups (DRGs). Perhaps more important in changing physician practices has been the surge in preadmission review and preadmission certification programs. Blue Cross and Blue Shield of North Carolina now has 200 groups with 130,000 participants in its preadmission certification program. Another factor is a steady growth of health maintenance organizations (HMOs), particularly IPA's, in which traditional fee-for-service patients are treated side-by-side with pre-paid patients.

All of the above-mentioned factors have the same effect. They force doctors to re-evaluate how they have been treating their patients.

North Carolina's Investor-Owned and Managed Hospitals

Thirty-eight of North Carolina's hospitals are operated on a for-profit basis: 26 are investor-owned and operated, eleven are managed under contract by an investor-owned multi-hospital system and one is operated under a lease arrangement by an investor-owned system. These 26 are both general acute care and specialty hospitals.

Multi-Hospital Systems Active in North Carolina (Hospital Owners)

System/Hospital	City	County	Number of Beds
<i>AMERICAN MEDICAL INTERNATIONAL, INC. (4)</i>			
1. Central Carolina Hospital	Sanford	Lee	142
2. Community Hospital of Rocky Mount	Rocky Mount	Nash	49
3. Frye Regional Medical Center	Hickory	Catawba	218
4. Gordon Crowell Memorial Hospital	Lincolnton	Lincoln	93
			492
<i>CHARTER MEDICAL CORPORATION (3)</i>			
5. Charter Hills Hospital	Greensboro	Guilford	100
6. Charter Mandala Center	Winston-Salem	Forsyth	75
7. Charter Northridge Hospital	Raleigh	Wake	66
			241

—table continued next page

System/Hospital	City	County	Number of Beds
<i>HEALTHCARE SERVICES OF AMERICA, INC. (5)</i>			
8. HSA Brynn Marr Hospital	Jacksonville	Onslow	34
9. HSA Cumberland Hospital	Fayetteville	Cumberland	154
10. Life Center of Fayetteville	Fayetteville	Cumberland	34
11. Life Center of Jacksonville	Jacksonville	Onslow	47
12. Life Center of Wilmington	Wilmington	New Hanover	27
			<hr/> 296
<i>HOSPITAL CORPORATION OF AMERICA (6)</i>			
13. Davis Community Hospital	Statesville	Iredell	149
14. Edgecombe General Hospital	Tarboro	Edgecombe	127
15. Highsmith-Rainey Memorial Hospital	Fayetteville	Cumberland	150
16. Holly Hill Hospital	Raleigh	Wake	108
17. Orthopaedic Hospital of Charlotte	Charlotte	Mecklenburg	166
18. Raleigh Community Hospital	Raleigh	Wake	140
			<hr/> 840
<i>HUMANA, INC. (2)</i>			
19. Charlotte Eye, Ear and Throat Hospital	Charlotte	Mecklenburg	68
20. Humana Hospital Greensboro	Greensboro	Guilford	130
			<hr/> 198
<i>PSYCHIATRIC INSTITUTES OF AMERICA (2)</i>			
21. Appalachian Hall	Asheville	Buncombe	125
22. Highland Hospital	Asheville	Buncombe	125
			<hr/> 250
<i>UNITED MEDICAL CORPORATION (1)</i>			
23. Hickory Memorial Hospital	Hickory	Catawba	64
<i>HEALTH CARE MANAGEMENT CORPORATION (1)</i>			
24. Blackwelder Memorial Hospital	Lenoir	Caldwell	31

Based on 1983 Hospital Summary Report and N.C. Center research

Hospitals Owned and Operated by Investor-Owned Corporations. Of the 26 North Carolina hospitals owned by investor-owned corporations, nine were founded by their present owners. One of the nine hospitals is Humana Hospital of Greensboro. Twelve of the state's 26 investor-owned hospitals were purchased by an investor-owned multi-hospital corporation from another investor-owned corporation. Only three investor-owned hospitals were formerly public hospitals with all three being

purchased from county governments since 1980. These hospitals are Highsmith-Rainey Hospital in Fayetteville, Edgecombe General Hospital in Tarboro, and Central Carolina Hospital (formerly Lee County Hospital) in Sanford.

Fifteen of the 26 investor-owned hospitals in North Carolina are specialty facilities — including nine psychiatric hospitals, three for the treatment of chemical dependency, two eye, ear, nose and throat hospitals, and one orthopedic hospital. The remaining

eleven are general, acute care hospitals.

Hospitals Managed Under Contract by Investor-Owned Corporations. Twelve of North Carolina's hospitals are managed under contract by investor-owned corporations. All are general, acute care facilities. Six are public hospitals owned by local hospital districts or county governments, five are owned by not-for-profit corporations, and one is investor-owned. Franklin Memorial Hospital in Louisburg is an example of a public hospital managed by an investor-owned company, Hospital Corporation of America.

Hospital Leased by Investor-Owned Corporation. In 1984, Brunswick County officials entered into a 40-year lease agreement with a multi-

hospital, investor-owned corporation whereby the corporation now has total operational control of the county-owned Brunswick Hospital — a general acute care facility.

Size of North Carolina Hospitals Affiliated With Investor-Owned Corporation. The 38 North Carolina hospitals affiliated with investor-owned corporations vary considerably in size, as measured by the number of beds in use. The investor-owned and operated hospitals vary from 27 to 275 beds, while those managed under a management contract by an investor-owned corporation range from 49 to 492 beds.

Twenty-two of the 38 are small hospitals with fewer than 100 beds. Many of the state's newest

Comparison of the Ten Largest Investor-Owned Hospital Management Companies in the United States and the Eleven Investor-Owned Management Companies in North Carolina^a

Company	Number of Hospitals	Number of Beds
<i>UNITED STATES^b</i>		
1. Hospital Corporation of America	417	59,946
2. American Medical International	142	19,673
3. Humana, Inc.	92	18,311
4. National Medical Enterprises	71	11,388
5. NuMed, Inc.	24	6,714
6. Charter Medical Corporation	56	5,798
7. Republic Health Corporation	33	3,935
8. Universal Health Services	30	3,486
9. Paracelsus Hospital Corporation	23	3,407
10. Hospital Management Professionals	24	3,016
<i>NORTH CAROLINA^c</i>		
1. Hospital Corporation of America	16	1,727
2. American Medical International	4	492
3. National Medical Enterprises	1	492
4. Healthcare Services of America	5	296
5. Psychiatric Institutes of America	2	250
6. Charter Medical Corporation	3	241
7. Humana, Inc.	2	198
8. Hospital Management Professionals	1	133
9. The Delta Group	1	65
10. United Medical Corporation	1	64
11. Health Care Management Corporation	1	31

^a The numbers of hospitals and beds include domestic- and foreign-owned, leased, or managed and hospitals under construction as of September 30, 1984.

^b Source: 1985 *Directory of Investor-Owned Hospitals and Hospital Management Companies*, published for the Federation of American Hospitals by FAH Review, Inc., Little Rock, Arkansas.

^c Compiled from N.C. Center research.

investor-owned facilities, particularly those devoted to a specialty, are in this group. Fifteen of the 38 are medium-sized hospitals with between 100 and 299 beds. Only one of the 38 hospitals in the state affiliated with an investor-owned corporation has more than 300 beds and would be considered large.

Investor-Owned Hospital Companies Active in North Carolina

This report describes the 11 investor-owned corporations that either own or manage hospitals in the state. It also provides similar information for SunHealth, Inc. — the largest not-for-profit hospital management corporation in North Carolina.

Each investor-owned corporation active in North Carolina is described in a profile using information available from personal and telephone interviews, annual corporate reports to shareholders and 10-k reports prepared for the U.S. Securities and Exchange Commission. Each profile is presented in two sections. The first, written in narrative form, describes corporate activities in general terms. Included is information regarding the corporation's affiliations with North Carolina hospitals, national and international corporate activities, financial performance, and strategic plan. The second part of each profile consists of a data table that provides greater detail on these topics.

Information about each corporation's finances is particularly helpful in understanding the growth

of investor-owned hospital management companies.

In this report, we have looked closely at those North Carolina hospitals which have opted for affiliation with an investor-owned corporation. We have also profiled the 11 investor-owned and one not-for-profit multi-hospital system active in the state. Finally, we have attempted to introduce the reader to some of the problems facing hospitals in the 1980s.

In its second report, the Center will present an analysis of the differences between investor-owned hospitals and other hospitals in the state. The report will examine the reasons underlying North Carolina hospitals' decisions to join investor-owned systems. It will also examine how community and hospital officials view the impact of investor-ownership on hospital care in this state.

The final report will be intended for use primarily as a guide to assist the public, county officials, and hospital officials in making decisions about affiliating with a multi-hospital system, whether for-profit or not-for-profit. It will examine in detail the political, social, and economic environments in which hospitals must operate, the problems hospitals face and the reason that a hospital might choose to explore alternative organizational structures. The report will describe each of the options available to a community or hospital and the pros and cons of each option. Finally, the guide will discuss the process which community and hospital officials should follow in making sound decisions regarding the future of their hospitals. □

INTRODUCTION

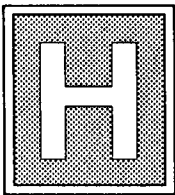
by Julie McCullough and William Haflett

"North Carolina Counties Call on For-Profit Hospitals to Cure Ills" ¹

"The New Medical -Industrial Complex" ²

"For Sale: Hospital Management" ³

"The Case for Selling the County Hospital" ⁴



Over the past several years, headlines such as these have appeared with increased frequency in newspapers and magazines both in North Carolina and throughout the United States. These articles reflect the public's growing interest in an

important change in the nation's health care industry: the involvement of for-profit enterprise in hospital ownership and management. This is the first in a series of three planned reports on investor-owned hospitals in North Carolina to be published by the North Carolina Center for Public Policy Research.

Since 1980, the number of North Carolina hospitals owned by, leased to, or managed by investor-owned corporations has increased dramatically. At the end of 1980, ten North Carolina hospitals were either owned or managed under contract by investor-owned corporations. Seven of the 10 were affiliated with multi-hospital, investor-owned systems. Since then, 28 additional hospitals have either been built by, acquired by, or have entered into a management contract with an investor-owned, multi-hospital system. Of the 164 hospitals in North Carolina — both general and specialty — that are not federally owned (a total of 25,984 beds), 26 are investor-owned and 12 are managed under contract by investor-owned groups (a total of 4,064 beds).

This recent rapid growth in the number of hospitals under the ownership or control of investor-owned corporations represents a new direction in health care in North Carolina and is a public policy issue worthy of objective study and analysis. By combining a detailed examination of statistical

information available for investor-owned, not-for-profit and publicly-owned hospitals with a series of interviews with key persons in each of the communities affected by the investor-owned movement, the Center will be able to describe and analyze the impact of the movement on health care in North Carolina.

The Center enters the study with no preconceptions on whether the movement toward investor-ownership or management of hospitals is a healthy or unhealthy trend. The Center has initiated this study because it is a significant development in the health care industry and because there is so little research available in this area.

This first report presents an overview of the issues raised by for-profit involvement in the hospital industry. It contains individual profiles on each of the 38 North Carolina hospitals owned or managed by the 11 investor-owned multi-hospital systems operating in the state. In addition, this report identifies some of the possible factors leading to accelerating investor-owned involvement in North Carolina. Finally, the report examines several other components of the health care industry that are relatively new to North Carolina, fast-growing, and that affect the viability of the state's community hospitals.

The second report, tentatively scheduled for publication later in 1986, will include statistical comparisons of the relative performances of investor-owned or managed hospitals, and public or not-for-profit hospitals. Included will be information regarding service levels, hospital expenditure levels, and patient charges. Included in this second report will be information gathered in interviews with

hospital administrators and trustees, county officials and others. The final report, also to be published later in 1986, will further discuss the relevant issues and their implications for North Carolina. This report will contain the Center's analysis and recommendations and should be particularly relevant for governmental officials, hospital trustees, and other decision-makers.

This first report is divided into seven chapters, plus a glossary of health care terms that follows this introduction. Chapter I describes briefly the organizational changes taking place in the nation's health care industry and some of the arguments for and against investor ownership of hospitals.

Chapter II provides an overview of North Carolina's hospital system and describes the state's hospitals in terms of number, size, type of ownership, operation and management, and affiliation with hospital systems. In Chapter III, many of the major factors leading to for-profit sector involvement in the health care system are presented and discussed.

Chapter IV describes some of the types of health care facilities that offer — on an outpatient basis — services that traditionally have been found in a hospital setting and that are now competing with the hospital for patients. These new facilities are placing pressures on the traditional North Carolina hospital that are in addition to those being brought to bear by the growing presence of investor-owned companies. An understanding of the many pressures on North Carolina hospitals from other health care facilities aids in appreciating the movement toward investor ownership and management. Therefore, some of these facilities — including freestanding

ambulatory surgery centers and health maintenance organizations — are examined in greater detail.

Chapter V focuses specifically on the 38 hospitals in the state that are owned or managed by investor-owned companies. Chapter VI profiles each of the corporations that own or manage hospitals in North Carolina. Included in each profile — to the extent the information was available — is a summary of the corporation's state, national, and international activities and selected financial and performance data. Chapter VI also includes similar data on the state's largest not-for-profit multi-hospital system, Sun-Health. Chapter VII previews the two N. C. Center reports on investor-owned hospitals that will follow.

Appendices A and B provide more detailed information about each of the North Carolina hospitals discussed in Chapter V. Appendix C is a list of the 468 diagnosis related groups (DRGs) that have been developed to determine how much a hospital may be paid for care provided under the federal Medicare system.

¹ "N. C. Counties Call on For-Profit Hospitals to Cure Ills," *The News and Observer* (Raleigh), November 9, 1981, p. 21.

² Relman, Arnold S., "The New Medical-Industrial Complex," *New England Journal of Medicine*, October 1980, pp. 963-970.

³ Downey, Gregg W., "For Sale: Hospital Management," *Modern Healthcare*, June 1974, pp. 35-43.

⁴ "The Case for Selling the County Hospital," *Trustee*, July 1982, pp. 22-23.

GLOSSARY OF HEALTH CARE TERMS

by Julie McCullough, William Haflett
and Blue Cross and Blue Shield of North Carolina¹

Admissions per 1,000

– the number of hospital admissions for each 1,000 persons per year.

Alternative delivery system

– any complete health care delivery system which differs significantly from the traditional system in one or more of its components; e.g. financing, organization of service units, etc.

Ambulatory surgery

– a cost containment program in which a patient has surgery performed in the morning and goes home to recuperate later in the day, thus avoiding a hospital admission and the accompanying charges.

Ancillary charges

– hospital charges to patients for services other than room and board and surgery; (e.g. x-ray, laboratory tests and examinations, consultant fees, anesthesia, etc.)

Beneficiaries

– patients who receive covered benefits under Medicare from the Part A or Part B trust fund.

Blended rate

– a combination of the federal and hospital specific rates to calculate a rate used for Medicare payment as set for in the new Prospective Payment System (PPS) based on diagnosis related groups (DRGs).

“Blue Cross”

– the words and identification symbol used by the not-for-profit hospital service corporation approved by the Blue Cross Association.

Blue Cross Plan

– a not-for-profit corporation operating under the approval of the Blue Cross Association and

administering a prepayment program for the purchase of hospital service.

“Blue Shield”

– the words and the identification symbol used by the not-for-profit medical care corporations approved by the National Association of Blue Cross Plans.

Blue Shield Plan

– a not-for-profit corporation sponsored and/or approved by a medical society to administer a voluntary prepayment medical-surgical program and operating under the membership standards of the National Association of Blue Shield Plans.

Classification of hospitals

– hospitals may be classified according to the length of the patient's stay (short-term or long-term), major type of service (general, psychiatric, chemical dependence, respiratory, or other specialty), and by types of control — that is, the type of organization responsible for the management and day-to-day operation of the hospital (government — either federal, state, or local; not-for-profit; or investor-owned).

Contract management (management under contract)

– an arrangement in which hospital owner contracts for another organization to manage the daily operations of the entire hospital. The owner retains legal responsibility for the hospital's activities and continues to participate in strategic planning. A contractual agreement whereby an outside organization manages a single department in the hospital is not considered to be contract management for purposes of this report.

Current Ratio

– The simplest measure of a firm's ability to raise funds to meet short term obligations.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Days per 1,000

– the number of days in acute care hospitals per 1,000 persons per year.

Debt/capitalization ratio

– A measure of the relative importance of debt and equity as a firm's financing source. The ratio is expressed as a percentage.

$$\text{Debt/Capitalization Ratio} = \frac{\text{Long term debt plus any debentures}}{\text{Total long term debt plus stockholder's equity}}$$

Deductible

– a front-end payment by the insured which must be met before an insurer has any liability.

Diagnosis related groups (DRGs)

– a system of classifying patients according to the type of disease, developed by researchers at Yale University. The system contains 468 mutually exclusive and exhaustive disease groups. Medicare's prospective payment system (PPS) is based on DRGs.

For-profit hospital

– a non-technical term synonymous with proprietary hospital. Although "for-profit" refers to the owner(s) desire to operate the hospital profitably, some proprietary hospitals may not be profitable.

Free-standing ambulatory surgery units

– licensed facilities other than doctors' and dentists' offices designed to provide surgery under local, regional, or general anesthesia with adequate recovery and post operative care for a period not to exceed 24 hours.

Health Care Financing Administration (HCFA)

– the division of the U.S. Department of Health and Human Services that oversees the administration of the Medicare and Medicaid programs.

Health Maintenance Organization (HMO)

– an organized system which provides an agreed upon set of comprehensive inpatient and outpatient health services to a voluntarily enrolled population in exchange for a pre-determined, fixed and periodic payment. The federal HMO Act of 1973 uses the term for programs that have met the act's requirements; however, the term is most often used, as here, to describe an organization which fits the generic description. There are three HMO models:

Staff – an HMO which delivers services

through physicians who are salaried employees.

Group – an HMO that contracts with a medical group practice to provide health services to HMO members. The group is usually compensated on a capitation basis.

Individual practice association – an HMO that contracts with physicians in individual practice, or an organization of such physicians, to provide health services to HMO members. The physicians are usually compensated on a modified fee-for-service basis.

Independent hospital

– a hospital that is not part of a multi-hospital system. An independent hospital can be public, not-for-profit, or investor-owned.

Intermediary

– an organization which has entered into an agreement with the administrator of HCFA to administer the Part A portion of the Medicare program as it relates to institutional providers of health care.

Investor-owned hospital

– a hospital owned by corporate shareholders or by partners in a limited partnership. Often used synonymously with proprietary hospital, for-profit hospital.

Manager

– one who is responsible for the hospital's day-to-day business activities.

Medicare

– popular name for benefits provided by Title XVIII of the Social Security Act which includes two programs of health insurance protection; Part A covers hospitalization and related institutional care; Part B covers physicians' care and some other minor health services.

Multi-hospital system

– two or more hospitals owned, operated or managed by a single organization. The entire system includes the central controlling organization.

Multi-institutional arrangement

– any arrangement between two or more hospitals to combine efforts or share services or equipment.

Not-for-profit hospital

– a hospital sanctioned under section 501(c)(3) of the Internal Revenue Code as a tax-exempt, charitable, community service organization. A not-for-profit hospital can be owned and operated either by a religious or secular private organization.

Operator

– one who has legal responsibility for a hospital's business activities.

Owner

– one who legally owns the physical plant and the land on which it is located.

Pass through costs

– certain costs (capital and educational) which are not included in the DRG payments but which are paid to eligible health care providers in 26 equal payments

during the provider's fiscal year.

Patient Days

- see Days per 1,000, page 4.

Peer review organization (PRO)

- a local organization that contracts with HCFA to provide review services and continually reviews the services rendered by all health care practitioners and providers to Medicare beneficiaries. The PRO is authorized by Title II of the 1983 Social Security Amendments.

Pre-admission certification (PAC) or Pre-admission review (PAR)

- a process by which proposed elective, non-emergency and non-maternity, hospital admissions are reviewed, using physician developed guidelines, to determine the appropriateness of the inpatient hospital setting and time of admission before full reimbursement will be approved.

Profit margin

- A measure of corporate profitability.

$$\text{Profit margin} = \frac{\text{Net income after taxes}}{\text{Total operating revenues}}$$

Proprietary hospital

- a hospital privately owned by an individual, a partnership, or a corporation. Also, the term is often used to refer to a hospital owned by doctors practicing at the facility.

Prospective Payment System (PPS)

- a prospective system of payment using DRGs for Medicare payments to hospitals as established by Title VI of the 1983 Social Security Amendments.

Public hospital

- A hospital owned by a federal, state or local governmental body. Local governmental bodies may

include hospital district officials or special hospital authorities.

Return on equity

- The best measure of the company's success in maximizing return on shareholders' investment in the firm.

$$\text{Return on equity} = \frac{\text{Net income to common shareholders}}{\text{Common shareholders' equity}}$$

Short-term acute care hospital

- an institution licensed under state law which provides room and board, ancillary services and professional services. As defined for PPS/DRG purposes, the average length of stay should be less than 25 days.

Voluntary hospital

- A nontechnical term generally used to refer to a not-for-profit hospital.

Working capital

- An absolute measure of a firm's liquidity.

$$\begin{aligned} & \text{Current assets} \\ & - \text{Current liabilities} \\ & \hline & = \text{Working capital} \end{aligned}$$

¹ Several of these definitions are from a document provided to those media representatives who attended a July 1984 workshop sponsored by Blue Cross and Blue Shield of North Carolina. □

PART I

Chapter I The National Investor-Owned Trend

Chapter II North Carolina Hospitals

Note — The hospital industry in North Carolina is changing. One indication of this is that since the authors completed their final drafts, the N.C. Center has learned of changes in ownership and management in the following North Carolina hospitals:

- Alamance County Hospital (ACH) and Memorial Hospital of Alamance County (MHAC)** merged and are now owned by the not-for-profit Alamance Health Services Inc. MHAC had a new name — Alamance Memorial Hospital. SunHealth, Inc. continues to manage both hospitals.
- Bertie County Memorial Hospital** in Windsor, a county-owned general hospital, is now leased by the investor-owned Westworld Community Healthcare Inc. The hospital had been managed by SunAlliance up until the hospital closed in July 1985. The county reopened the hospital two months later upon entering a management contract with the investor-owned Forum Health Investors (FHI). Westworld replaced FHI in February 1986.
- CPC Cedar Springs Hospital**, a psychiatric and chemical dependency hospital for adolescents, opened October 14, 1985 in Mecklenburg County, and is owned and managed by the investor-owned Community Psychiatric Centers of Santa Anna, California.
- Cape Fear Valley Hospital** in Fayetteville, a county-owned general hospital, changed its management contract from the investor-owned National Medical Enterprises, Inc. to the not-for-profit SunHealth, Inc.
- Charter Pines Hospital** in Charlotte, a new psychiatric facility owned by Charter Medical Corporation, opened.
- Edgecombe General Hospital** in Tarboro, a general hospital owned by Hospital Corporation of America, has changed its name to Heritage Hospital and has built a new replacement facility.
- Fletcher Hospital** in Henderson County changed its name to Park Ridge Hospital. The not-for-profit Adventist Health Systems/Sunbelt Health Care Corporation continues to manage it.
- Gordon Crowell Hospital** in Lincolnton, owned by American Medical International, closed.
- Hugh Chatham Memorial Hospital** in Elkin, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Huntersville Hospital** in Mecklenburg County, a county-owned general hospital, closed.
- L. Richardson Memorial Hospital** in Greensboro, a not-for-profit hospital, changed its management contract from the not-for-profit SunAlliance to Hospital Corporation of America.
- Lowrance Memorial Hospital** in Mooresville was purchased from Iredell County by the investor-owned Hospital Management Associates. The general hospital had been managed under contract by Hospital Corporation of America.
- Rutherford Hospital** in Rutherfordton, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Warren General Hospital** in Warrenton, a county-owned general hospital, closed.
- Wayne County Memorial Hospital** in Goldsboro went from county-owned and operated status to a not-for-profit corporation-owned and operated status. On October 1, 1985, the hospital officially reorganized into the Wayne Memorial Hospital, Inc.

Changes in the text and tables have not been made to reflect these changes. These changes will be reflected in subsequent research and published reports.

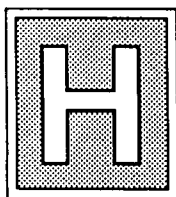
— Editor

CHAPTER I

THE NATIONAL INVESTOR-OWNED TREND

A Description and Why It Can Be Good or Bad

by Julie McCullough, William Haflett, and Ran Coble



Since World War II, the majority of American hospitals have been charitable institutions, owned and operated by community-based, not-for-profit organizations or by state or local governmental bodies.

Most of these hospitals have been independently operated, performing their own administrative and clinical functions. At the same time, there have been significant exceptions to this pattern of independent, not-for-profit hospital ownership and management. For example, the United States government has owned and operated the Veterans Administration (VA) hospital system since 1930. Also, the American hospital industry has always had a large proprietary, or for-profit, component comprised of independent hospitals owned and managed by practicing physicians. Despite these and other examples, most hospitals in this country historically have been locally-owned, independent, not-for-profit or public facilities.

Two interrelated structural changes are rapidly redefining the traditional patterns of hospital ownership and management. First, the proprietary, or for-profit, sector has taken an increasingly active role within the health care industry. The number of hospitals and beds owned, operated or managed by for-profit organizations has increased dramatically over the last five years.¹ Second, there is a growing tendency for independently-owned hospitals to enter into multi-institutional arrangements.² Such arrangements vary in nature and can range from two or three hospitals loosely organized as a bulk purchasing group to outright sale of a hospital to a multi-

national corporation owning several hundred health care facilities around the world. While neither of these structural forms is new, the speed with which hospitals are joining multi-hospital systems merits attention. In addition to the Center's report on the North Carolina hospital industry, the Institute of Medicine of the National Academy of Science has undertaken a two-year study to clarify, document, and assess the implications of the growth and development of for-profit health care organizations in the United States.

This chapter provides an introduction to the types of hospital ownership and management prevalent in the U. S. and in North Carolina today. It also contains statistical summaries of hospital ownership patterns over the past thirty years, demonstrating the growing significance of multi-hospital systems and the for-profit sector in the American health care industry.

Types of Hospital Ownership

Hospital ownership can be classified in one of three broadly-defined categories: public; not-for-profit (both secular and religious, and also called voluntary); and investor-owned (also called private for-profit, or proprietary).

•**Public** — Public hospitals include facilities owned by federal, state or local governmental units. Examples of federal hospitals in North Carolina are the U.S. Public Health Service Indian Hospital in Cherokee and the Veterans Administration (VA) Medical Center in Durham. Federal hospitals, such

as those in the VA system, generally serve only very limited populations and are not regulated at the state level. Because of the unique character of federally-owned hospitals, they have been excluded from the Center's study. In this report, the term "public hospital" will refer specifically to those owned by state or local governmental bodies.

State hospitals, like federal hospitals, often are dedicated to serving special purposes. For example, there are five psychiatric and three alcoholic rehabilitation centers owned and operated by the State of North Carolina. An example of a state psychiatric hospital is Broughton Hospital in Morganton. State governments also fund many large regional and teaching hospitals, providing services and facilities that local governments themselves cannot afford to offer.³ North Carolina Memorial Hospital, based at the University of North Carolina at Chapel Hill, is an example of a large teaching hospital.

The majority of the nation's public hospitals are community-based and are owned by counties, cities, local or regional hospital districts or special hospital authorities. Local public hospitals are usually general, acute-care facilities that provide a broad range of health care services. An example of such a locally-owned public hospital in North Carolina is Iredell Memorial Hospital in Statesville. Long-range strategic decisions generally are made jointly by the individual hospital's board of trustees and the governmental body owning the hospital. The hospital administrator, working under the direction of the board of trustees, is responsible for day-to-day operational management and control.

Public hospitals have been, and continue to be, an important source of health services for the poor, the unemployed, and other dependent groups. They provide opportunities for medical education and research, particularly within the large regional and teaching hospitals. And, public hospitals often offer specialized services not available elsewhere in the health care system.⁴

•**Not-for-profit (secular or religious)** — Not-for-profit hospitals are privately-owned and operated as charitable, community service organizations. The U.S. Internal Revenue Service grants not-for-profit, tax-exempt status to these hospitals under section 501(c)(3) of the Internal Revenue Code based on organizational purpose and use of revenues and earnings. A community board of trustees usually is appointed to direct the activities of secular not-for-profit hospitals. Religious hospitals are governed by the appropriate unit within the church or, in some cases, by lay boards. Both types of not-for-profit hospitals employ hospital administrators to manage daily operations.

Not-for-profit hospitals sometimes are referred to as "voluntary," "nonprofit," or "tax-

exempt" hospitals. Although technical distinctions can be made among these terms, much of the literature uses them synonymously. For purposes of this report, the terms will be used interchangeably. An example of a not-for-profit hospital in North Carolina is The Presbyterian Hospital in Charlotte.

•**Investor-owned** — Investor-owned hospitals also are privately-owned; however, unlike not-for-profit hospitals, they are not tax-exempt. An investor-owned hospital may be owned by an individual, a partnership, or a corporation. The major distinction between this and other types of hospital ownership is profit orientation. The investor-owned hospital seeks to earn a profit for its shareholders in addition to providing community health care services. Hence, investor-owned hospitals often are referred to as "proprietary" or "for-profit" hospitals. Again, minor differences among the terms do exist; however, popular literature generally does not make such distinctions. The glossary that is found on page 3 defines each of these terms more precisely.

Hospital Ownership Patterns

At the close of World War II, the not-for-profit segment of the hospital industry comprised 58% of the number of short-term general hospitals, and provided 64% of the nation's hospital beds. Table 1.1, compiled from data published in *Public General Hospitals in Crisis*, also shows that 24% of the hospitals and 8 percent of the beds were under investor-owned sponsorship in 1946. Non-federal public governmental bodies owned and operated 18 percent of the hospitals and 28 percent of the beds in 1946.

By 1975, the total number of short-term general hospitals in the United States had grown to 5,979, a 35 percent increase over 1946 totals. Of this number, 56 percent were not-for-profit, 13 percent were investor-owned, and 31 percent were public hospitals. The dramatic increase in public hospital ownership was largely due to the Hill-Burton Act, enacted by Congress in 1946 through which federal funds were made available to assist building and renovation of not-for-profit hospitals in local communities. Because this money was not available to local doctor-owned hospitals, many of the latter type of facilities were sold to the community and became not-for-profit or were closed.

Despite the surging growth in the number of public general hospitals during the three decades following World War II, the percentage of total beds in public facilities actually declined. By 1975, the number of beds in public hospitals was 215,000, an absolute increase of 62 percent over 1946 totals. However, this represented a decline in the percentage

Table 1.1: Number of Non-Federal Short-Term General Hospitals and Beds, by Ownership, 1946-1975^a

Ownership	Number of Hospitals by Year						
	1946	1950	1955	1960	1965	1970	1975
Voluntary ^b	2,584	2,871	3,097	3,291	3,426	3,386	3,365
Investor-owned ^c	1,076	1,218	1,020	856	857	769	775
State/local government ^d	785	942	1,120	1,260	1,453	1,704	1,840
Total ^e	4,445	5,031	5,237	5,407	5,736	5,859	5,979

Ownership	Number of Beds by Year (thousands)						
	1946	1950	1955	1960	1965	1970	1975
Voluntary	301	332	389	446	515	592	659
Investor-owned	39	42	37	37	47	53	73
State/local government	133	131	142	156	179	204	215
Total	473	505	568	639	741	848	947

^a Includes special hospitals other than those for psychiatric service, tuberculosis, and other respiratory diseases.

^b Non-governmental not-for-profit.

^c For-profit (most were locally owned by physicians).

^d Includes city, county, hospital district and state-owned hospitals.

^e May not add to total shown in source.

Source: Samuel Wolfe and Hila Richardson Sherer, *Public General Hospitals in Crisis*, 1977, Table 1, p. 7.

of beds under public sponsorship to 23 percent. Meanwhile, not-for-profit and investor-owned facilities accounted for 70 percent and 8 percent of the 1975 bed totals, respectively. These changes reflected the trend toward smaller public hospitals and larger not-for-profit hospitals. The average number of beds per facility fell from 169 in 1946 to 117 in 1975 for public hospitals, while increasing from 116 to 196 over the same period in not-for-profit facilities. Investor-owned hospitals also experienced dramatic growth in size, moving from an average of 36 beds per facility in 1946 to 94 by 1975.

Since 1975, the number of investor-owned hospitals in the United States has increased dramatically. In 1984, the directory of the Federation of American Hospitals (FAH), the association of proprietary hospitals and hospital systems, listed 1,193 investor-owned hospitals in this country.⁵ (See Table 1.2.) FAH has stated that between 1977 and 1982, there was a 43 percent increase in the number of investor-owned hospitals and a 62 percent increase in the number of beds owned by the investor-owned sector.⁶ The growth in investor-owned hospitals has not been limited to general hospitals; in fact, the *New*

Table 1.2: U.S. Activities of Investor-Owned Hospital Industry, 1984

<i>Operating</i>	# of Hospitals	# of Beds
Owened/Operated	1,193	141,463
Managed Public and Private		
Not-for-Profit	325	41,774
Managed Investor-Owned	32	2,821
Sub-Total	1,550	186,058
<i>Under Construction</i>		
Owened	83	9,587
Grand Total	1,633	195,645

Source: Federation of American Hospitals, *1985 Directory*, 1984.

England Journal of Medicine reported in late 1980 that while over 15 percent of all general acute-care hospitals were investor-owned, that sector of the industry owned 50 percent of the nation's psychiatric hospitals.⁷

Multi-Hospital Systems — A Definition

A multi-hospital system consists of a group of hospitals with common ownership or management. Any hospital owned, operated, or managed by an organization that owns, operates, or manages two or more hospitals is part of a multi-hospital system. The organization that owns, operates, or manages such a system generally is called a hospital management company. Like individual hospitals, hospital management companies can be public, not-for-profit, or investor-owned.

A hospital can become part of a multi-hospital system in a variety of ways. Two or more hospitals can join together, merging to form an

entirely new system. More commonly, a hospital can join an existing system either through lease to, or purchase by, a hospital management company. In a *leasing arrangement*, the original owner retains legal ownership of the land and building, but cedes all operational responsibility to the lessee. In a *purchase agreement*, the hospital management company becomes the new owner of the physical facilities as well as responsible for the operations. A final mechanism through which a hospital may join a multi-hospital system is *management under contract*. For an annual fee, the management company performs the day-to-day administrative functions while the owner retains complete ownership and a large measure of strategic control. Hospitals managed under contract can be public, not-for-profit, or investor-owned.

Many hospitals work together under cooperative agreements but are not classified as members of a multi-hospital system. For example, two or more hospitals may share certain services or equipment or may jointly hire management consultants for advice on methods improvement. Both are

Table 1.3: Total Beds and Units in Multi-Hospital Systems

Total Beds, Owned, Leased, and Managed			
<i>Type of System</i>	<i>1980</i>	<i>1979</i>	<i>% Change</i>
Religious NFP	110,740	106,062	+ 4.4%
Investor-Owned	103,280	90,580	+14.0%
Secular Nonprofit	58,731	56,398	+ 4.1%
Public	21,448	21,718	- 1.2%
Total	294,199	274,758	+ 7.1%

Total Hospitals Owned, Leased and Managed			
<i>Type of System</i>	<i>1980</i>	<i>1979</i>	<i>% Change</i>
Religious NFP	492	455	+ 8.1%
Investor-Owned	802	695	+15.4%
Secular Nonprofit	329	301	+ 9.3%
Public	58	59	- 1.7%
Total	1,681	1,510	+11.3%

Number of Systems			
<i>Type of System</i>	<i>1980</i>	<i>1979</i>	<i>% Change</i>
Religious NFP	69	68	+ 1.5%
Investor-Owned	34	33	+ 3.0%
Secular Nonprofit	58	57	+ 1.8%
Public	15	15	0
Total	176	173	+ 1.8%

Source: "1980 Multihospital System Survey," *Modern Healthcare*, April 1981, p. 80.

Table 1.4: Multi-Hospital System Revenues

<i>Type of System</i>	Total (Millions)		<i>% Change</i>	Per System (Millions)	
	1980	1979		1980	1979
Investor-Owned (22)	\$ 5,500	\$ 3,926	+ 40.1%	\$ 250.0	\$ 178.5
Public (9)	1,927	1,889	+ 2.0%	214.1	209.8
Religious NFP (32)	2,987	2,494	+ 19.8%	93.4	77.9
Secular NFP (38)	4,333	3,698	+ 17.2%	114.0	97.3
Total (101)	\$14,747	\$12,006	+ 22.8%	\$ 146.0	\$ 118.9

Note: Number in parentheses represents number of systems reporting.

Source: "1980 Multihospital System Survey," *Modern Healthcare*, April 1981, p. 80.

examples of multi-institutional arrangements, but not all multi-institutional arrangements are multi-hospital systems. Chapter III will explore in some detail the factors influencing hospitals to enter into such arrangements or to join a hospital system.

Multi-Hospital Systems — Their Magnitude

Because of the scarcity of available data, it is difficult to estimate the number of hospitals in multi-hospital systems prior to the late 1970s. The 1977 publication *Public General Hospitals in Crisis* makes no reference to the existence or influence of hospital systems. However, in 1979, *Modern Healthcare* began compiling an annual survey of multi-hospital systems, and the American Hospital Association now publishes a yearly Directory of Multi-Hospital Systems. (See Table 1.3.)

In 1981, *Modern Healthcare* reported that approximately one-third of the 6,000 non-federal hospitals in the United States were owned, leased, or managed by a hospital system. *Modern Healthcare* estimated that 176 multi-hospital systems were operating in 1980, with total revenues for that year alone nearly \$15 billion.⁸ (See Table 1.4.)

Of the 176 systems identified, 127 (72 percent) were not-for-profit organizations, 34 (20 percent) were investor-owned, and 15 (nine percent) were public, not-for-profit systems. The number of hospitals in these 176 systems (a total of 1,681 hospitals) was distributed somewhat differently — 49 percent of the hospitals were in not-for-profit hospital systems and 48 percent were in investor-owned systems. Fewer than 3 percent of these hospitals were in public systems.⁹ The Federation of American Hospitals reported that by 1982, more than 1,000 hospitals were owned or managed by investor-owned hospital management companies.¹⁰

In 1980, almost 500 hospitals and more than 50,000 beds were managed under contract by a hospital management company.¹¹ This represents approximately 8 percent of all hospitals in the nation. Table 1.5 shows that investor-owned systems managed 69 percent of these hospitals; not-for-profit systems managed 30 percent, and public systems managed less than 1 percent.

As this chapter has shown, the size and importance of the hospital industry's investor-owned segment has increased greatly in the last ten years. Much of this growth has been reflected in the expansion of multi-hospital systems, which now encompass nearly one-third of the nation's hospitals. These trends are nationwide in their scope. However, in few states have the growth and expansion of investor-owned hospital systems been more apparent or significant than in North Carolina. Chapter V takes a closer look at the impact of investor-ownership on North Carolina's hospital industry.

A Brief Listing of Some Possible Advantages and Disadvantages of Investor-Ownership of Hospitals

During the Center's research on investor-owned hospitals in North Carolina, a number of advantages and disadvantages of this type of hospital ownership and management were suggested by local officials, hospital administrators in both investor-owned and not-for-profit hospitals, medical staff, representatives of investor-owned corporations, and hospital trustees. A brief listing of these advantages and disadvantages will help explain why the N. C. Center is researching this segment of the health care industry. However, this is merely a recitation of *possible* pros and cons. The N. C. Center's research into these suggestions is not complete, and they are listed here only to clarify some of the issues involved in this area of health care policy. The Center's findings on these and other

Table 1.5: Contract Management Summary

Type of Manager	Beds Managed			Units Managed		
	1980	1979	% Change	1980	1979	% Change
Investor-Owned	36,798	32,580	+ 13.0%	342	300	+ 14.0%
Secular NFP	7,102	5,623	+ 26.3%	77	56	+ 37.5%
Religious NFP	6,169	5,673	+ 8.7%	72	64	+ 12.5%
Public	<u>99</u>	<u>99</u>	<u>+ 0.0%</u>	<u>2</u>	<u>2</u>	<u>0.0%</u>
Total	50,168	43,975	+ 14.1%	493	422	+ 16.8%

Type of Manager	Percentage Share of Managed Beds		Number of Managers		
	1980	1979	1980	1979	% Change
Investor-Owned	73.3	74.1	24	23	+ 4.3%
Secular NFP	14.2	12.8	18	15	+ 20.0%
Religious NFP	12.3	12.9	26	24	+ 8.3%
Public	<u>.2</u>	<u>.2</u>	<u>1</u>	<u>1</u>	<u>0.0%</u>
Total	100.0	100.0	69	63	+ 9.5%

issues will be included in the second report in this series which will be published in late 1986.

A. Possible Advantages

1. *Access to Private Capital.* First, the major advantage investor-ownership or management contracts *may* offer is access to private capital that can be used to repair a hospital building or to replace an old facility with a new one. Multi-national corporations owned by shareholders usually have more capital available to update or replace hospital facilities, unless the local trustees of not-for-profit hospitals have set aside funds for capital improvements.

2. Access to a National Personnel Pool.

Second, investor-owned corporations *may* use their national systems to develop a pool of qualified personnel, particularly hospital administrators. For example, the hospital administrator at an HCA-managed hospital in the small coastal town of Supply, N.C. came from Pensacola, Fla., while the hospital administrator at the National Medical Enterprises-managed Cape Fear Valley Hospital in Fayetteville came from Dallas, Texas. The parent corporation is also able to help recruit physicians. As Lewis Ridgeway, the administrator of an HCA-owned hospital in Tarboro put it in testimony before a legislative study commission on public health facilities, "We can now offer physicians opportunities to come with guarantees. Before, we didn't have the facilities, nor did we have the equipment."

3. *Management Expertise.* Third, related to this is the advantage of management expertise. The skills required to be a good county commissioner or a good doctor are not necessarily the same skills that would guarantee a well-run hospital providing quality medical care at a reasonable cost in an up-to-date facility which doesn't lose money. The point that management expertise can make a difference is perhaps best made by the fact that the hospital in Supply was \$535,000 in the red in FY 81-82 before its management contract was signed in 1981, and now its financial position is greatly improved.

4. *Volume Purchasing.* Fourth, any multi-institutional system has the advantage of saving money through large-volume purchases of basic medical necessities such as intravenous solutions. A single hospital usually cannot approach the buying power of an investor-owned corporation.

5. *Promoting Competition in the Hospital Sector.* The fifth possible advantage is that the presence of investor-owned hospitals in a community may increase competition in the health care sector generally. All hospitals are increasingly following some practices that heretofore were more characteristic of investor-owned hospitals than not-for-profits — practices like marketing of certain services. The investor-owned hospitals were also perhaps quicker to allocate the cost to a department within the hospital where the reimbursement rate from third party payment sources (private health insurance or government payment) would be the greatest. Finally,

most hospitals are now stepping up their efforts to collect bad debts.

6. *Tax Advantages.* The sixth advantage is that if the hospital changes from a county-owned or other public facility to an investor-owned facility, it may also change from being tax-supported to being a taxpayer, simply because investor-owned hospitals are subject to local property taxes and corporate income tax levies.

7. *Taking the County Out of the Hospital Business.* The final apparent advantage applies only to situations where the hospital is county- or city-owned. County commissioners who turned over a county-owned facility that had been losing money to a private company frequently say a burden has been lifted from their shoulders. This advantage is more related to politics than economic questions or health questions, but this political advantage should not be underestimated.

B. Possible Disadvantages

1. *Investor-owned Hospitals May Have Higher Charges.* The chief possible disadvantage of investor-owned hospitals is that they *may* have higher charges. In January of 1984, Blue Cross-Blue Shield of North Carolina released a study of average charges to Blue Cross subscribers in 1981-82 for three procedures in North Carolina acute care hospitals that were owned by investor-owned chains and which had enough cases to provide valid charge data. The study found that charges were higher in six investor-owned hospitals than for other hospitals of similar size in North Carolina.¹² The procedures checked were charges for normal deliveries, hysterectomies, and cholecystectomies (gall bladder removals). The origin of these higher charges was not room rates but ancillary charges like pharmacy, medical/surgical supplies, and to a lesser extent, operating room and anesthesia charges. While this study was criticized because it examined a small number of procedures in a small number of hospitals, it is consistent with some other national studies.

Lewin and Associates analyzed 1978 Medicare cost reports and found that charges per admission were 17 percent higher and actual collections were 12 percent higher in investor-owned hospitals, due mainly to higher revenues from ancillary services like lab tests, radiology procedures, and supplies.¹³

Pattison and Katz found that inpatient charges per admission in California hospitals in 1980 were 24

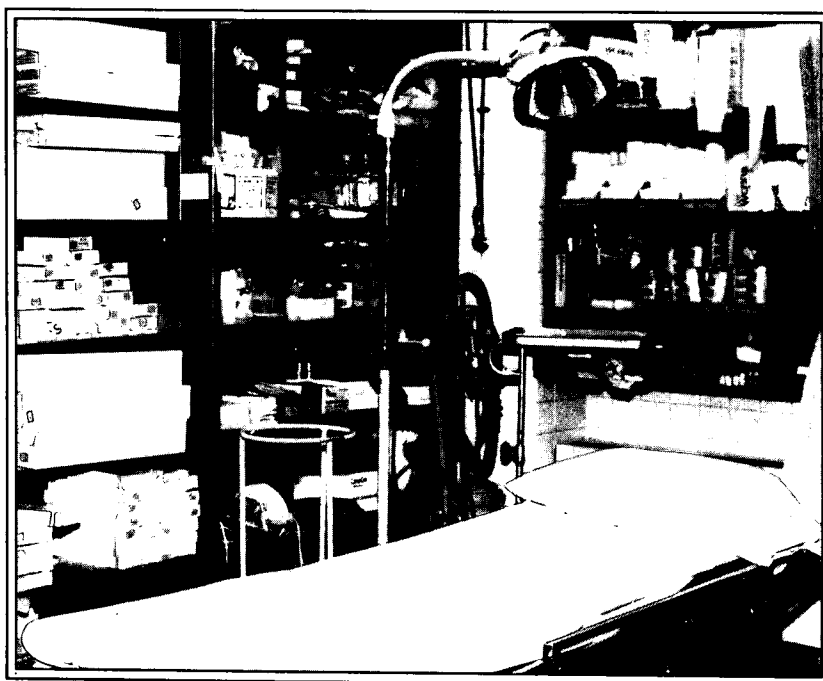
percent higher and collections 10 percent higher in investor-owned hospitals. Again, the differences were attributed to ancillary services.¹⁴

The Florida Hospital Cost Containment Board found charges were 15 percent higher and collections 11 percent higher in the proprietary hospitals in both 1980 and 1981.¹⁵

2. *Indigent Care.* The other major concern expressed about hospitals affiliated with investor-owned corporations is whether they provide less indigent care than do not-for-profit hospitals. This is an area, however, where there seems to have been more talk than research. So far in North Carolina, the level of indigent care in investor-owned hospitals seems to vary more according to whether there are other general acute care hospitals in the same or nearby counties.

3. *Skimming the Cream.* A third possible disadvantage of investor-owned operations is that hospitals affiliated with investor-owned corporations may narrow the range of services or alter the patient mix to the extent that investor-owned hospitals get more of the *paying* patients — leaving fewer revenue-producing patients or services for not-for-profit hospitals. The Center is researching this question for our second report in several ways: Are there any requirements for deposits upon admission that would tend to discourage patients without insurance? What is the *range* of services offered in a hospital, and which ones are the revenue-winners (like outpatient surgery or radiology departments) compared with revenue-losing services (like obstetrics or emergency room care)?

4. *Changing the Nature of Health Care.* Just as there is a political factor that may be an advantage



of investor-owned corporations, there is a philosophical factor that is sometimes suggested as a disadvantage. This can be best expressed as a question of whether profit considerations properly belong in the delivery of hospital care. At this point, research questions end, and the discussion shifts to individual views about who has the responsibility for delivery of health care in a democratic society.

C. *Some Factors Not Necessarily Related to For-Profit or Not-For-Profit Status.* Some of the advantages previously mentioned may not necessarily be the product of a for-profit mode of operation. Advantages like lower prices due to volume purchasing and access to a larger personnel pool may accrue to any multi-institutional system and not just to a for-profit, multi-institutional system. One reason the Center's research may be of particular interest is the long-time presence in North Carolina of a not-for-profit, multi-institutional arrangement that combines some of the advantages of a multi-institutional system with not-for-profit status. This not-for-profit corporation, originally called Carolina Hospital and Health Services (CHHS) and now a part of SunHealth, manages hospitals under contract in ten states. In North Carolina, SunHealth manages 17 general hospitals — 10 public and seven not-for-profit. (A list of these hospitals is in Table 2.13 on page 31.) The advantages of volume purchasing, management expertise, and a larger personnel pool may thus be available to not-for-profit multi-institutional systems as well.

Chapter V takes a closer look at the impact of investor-ownership of North Carolina's hospital industry. □

⁸Donald E. L. Johnson and Vince DiPaola, "\$1.7 Billion Kaiser on Top," *Modern Healthcare*, April 1981, pp. 79-80.

⁹*Ibid.*, p. 80.

¹⁰*Op. cit.*, 1983 *Directory: Investor-Owned Hospitals*, p. 7.

¹¹Donald E. L. Johnson and Vince DiPaola, "Non-profits Compete Effectively with Investor-Owned Contract Firms," *Modern Healthcare*, April 1981, p. 84.

¹²Blue Cross and Blue Shield of North Carolina, *Proprietary Hospital Charges to BCBSNC Subscribers*, a report prepared by the Health Economics Research Unit (Durham, NC: Blue Cross and Blue Shield of North Carolina, July 7, 1983), pp. 2-7.

¹³Lewin and Associates, *Studies of the Comparative Economic Performance of Selected Non-Profit and Investor Owned Hospital Systems, Volume I: Industry Analysis*, 1981.

¹⁴Robert V. Pattison, Ph.D. and Hallie M. Katz, M.B.A., M.S.P.H., "Investor-Owned and Not-for-Profit Hospitals: A Comparison Based on California Data," *Hospital Economics*, Vol. 309, No. 6 (August 11, 1983).

¹⁵State of Florida Hospital Cost Containment Board, *Annual Report 1983-84*, March 1, 1984.

¹Federation of American Hospitals, 1985 *Directory: Investor-Owned Hospitals and Hospital Management Companies*, (Arkansas: Federation of American Hospitals, 1984), p. 25.

²*Ibid.*

³Samuel Wolfe and Hila Richardson Sherer, *Public General Hospitals in Crisis*, (Washington, D.C.: Coalition of Public Employees, September 1977), p. 5.

⁴*Ibid.*, p. 7.

⁵*Op. cit.*, 1985 *Directory: Investor-Owned Hospitals*, p. 7.

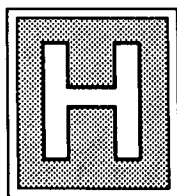
⁶Federation of American Hospitals, 1983 *Directory: Investor-Owned Hospitals and Hospital Management Companies*, (Arkansas: Federation of American Hospitals, 1982), p. 6.

⁷Arnold S. Relman, "The New Medical-Industrial Complex," *New England Journal of Medicine*, October 1980, pp. 963-964.

CHAPTER II

NORTH CAROLINA HOSPITALS

by William Haflett



This chapter serves as an introduction to the hospital industry in North Carolina. It contains summary data on the 164 non-federal hospitals in North Carolina (both general and specialty), and includes information on hospital location, ownership, type of service, and size. It also includes information on the activities of multi-hospital systems in the North Carolina hospital industry. The broad overview presented in this chapter is an important aid in understanding the role of investor-owned hospitals and multi-hospital systems in North Carolina, as discussed in Chapters V and VI.

Location¹

North Carolina's 164 non-federal hospitals are located in 85 of the state's 100 counties. Fourteen counties have three or more hospitals, 23 counties have two hospitals, and 48 counties have one hospital each. No hospitals are located in the remaining 15 North Carolina counties, situated primarily along the more sparsely populated coastline. Map 2.1 identifies the location of the state's 164 non-federal hospitals. Table 2.1 lists North Carolina's 100 counties and indicates the number of non-federal hospitals in each. The 130 general, acute care hospitals active in North Carolina are similarly identified, by county, in Table 2.2.

Ownership²

a. Public. Excluding the nine federal facilities (Table 2.3) in the state, North Carolina has 77 public hospitals. Of these 77 facilities, 11 are owned and operated by the state. Table 2.4 identifies the 11 state-owned hospitals. Forty-five of the state's 77 public hospitals are owned by counties; 11 are owned by other local governmental units. The diversity of possible ownership forms is illustrated by these 11 hospitals: six are owned by specially-created hospital authorities; two are owned by cities; two are owned by hospital districts; and one is owned by a township. Table 2.5 lists the 66 hospitals owned by local governmental units and indicates the specific ownership form of each.

Although 66 of the state's hospitals are owned by local governmental units, the majority are operated under management contract by other public or private organizations. Of the 55 county-owned facilities, only 11 are county-operated. Thirty-nine are managed by not-for-profit corporations created solely for the purpose of hospital management or by the multi-institutional not-for-profit SunHealth, Inc. management company. Two county hospitals are managed by hospital authorities; five are operated under management contract by investor-owned corporations. The remaining county-owned facility is leased to an investor-owned corporation which exercises complete operational control over the facility.

—continued page 21

Map 2.1: Location of Non-Federal Hospitals in North Carolina

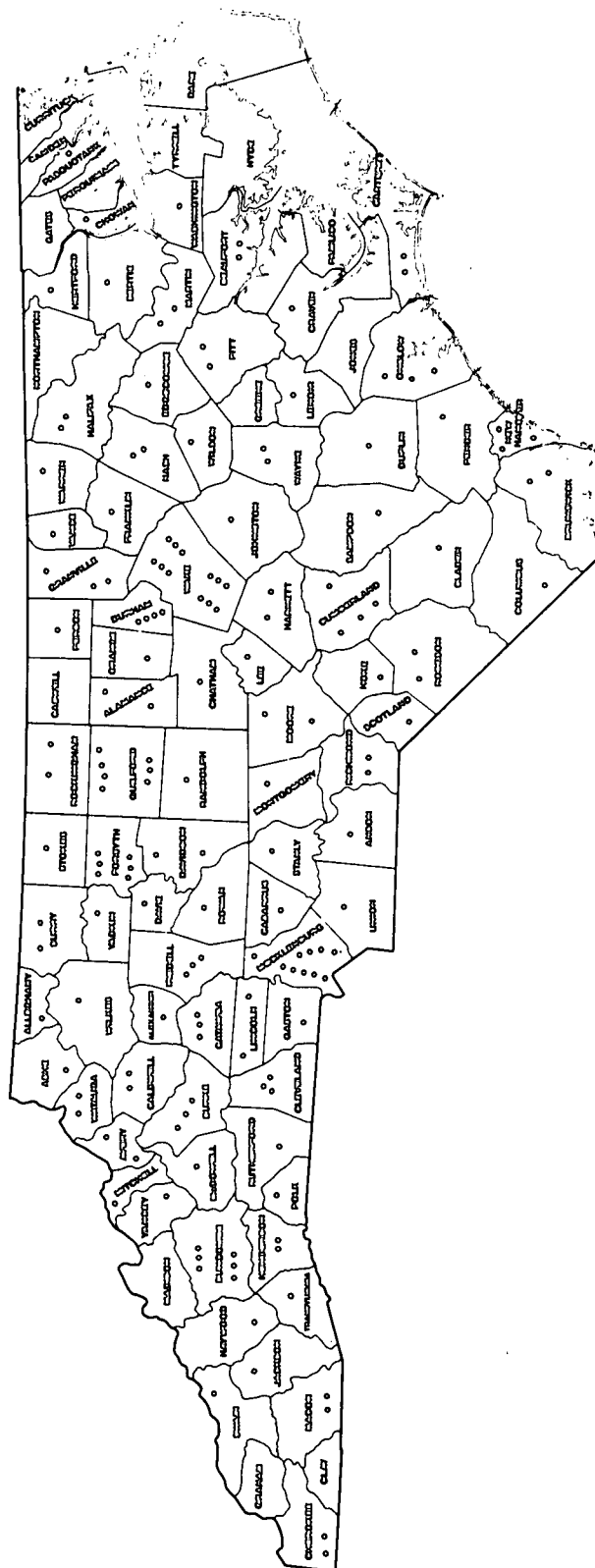


Table 2.1: Non-Federal Hospitals In North Carolina By County

Counties with 3+ hospitals	Counties with 2 hospitals	Counties with 1 hospital	Counties with no hospitals
Buncombe (6)	Alamance	Alexander	Camden
Burke (3)	Avery	Alleghany	Caswell
Catawba (3)	Beaufort	Anson	Clay
Cleveland (3)	Brunswick	Ashe	Currituck
Cumberland (4)	Caldwell	Bertie	Dare
Durham (4)	Carteret	Bladen	Gates
Forsyth (6)	Cherokee	Cabarrus	Graham
Granville (3)	Davidson	Chatham	Greene
Guilford (7)	Halifax	Chowan	Hyde
Iredell (3)	Harnett	Columbus	Jones
Mecklenburg (10)	Henderson	Craven	Madison
New Hanover (3)	Lincoln	Davie	Northampton
Onslow (3)	Macon	Duplin	Pamlico
Wake (12)	Martin	Edgecombe	Perquimans
	Moore	Franklin	Tyrrell
	Nash	Gaston	
	Pitt	Haywood	
	Richmond	Hertford	
	Robeson	Hoke	
	Rockingham	Jackson	
	Surry	Johnston	
	Watauga	Lee	
	Wayne	Lenoir	
		McDowell	
		Mitchell	
		Montgomery	
		Orange	
		Pasquotank	
		Pender	
		Person	
		Polk	
		Randolph	
		Rowan	
		Rutherford	
		Sampson	
		Scotland	
		Stanly	
		Stokes	
		Swain	
		Transylvania	
		Union	
		Vance	
		Warren	
		Washington	
		Wilkes	
		Wilson	
		Yadkin	
		Yancey	

TOTAL Non-federal Hospitals: 164

Based on 1983 Summary Report and N.C. Center research

Table 2.2: Non-Federal General Hospitals In North Carolina By County

Counties with 3+ hospitals	Counties with 2 hospitals	Counties with 1 hospital	Counties with no hospitals
Cleveland (3)	Alamance	Alexander	Camden
Forsyth (3)	Avery	Alleghany	Caswell
Guilford (5)	Beaufort	Anson	Clay
Iredell (3)	Brunswick	Ashe	Currituck
Mecklenburg (5)	Buncombe	Bertie	Dare
Wake (7)	Burke	Bladen	Gates
	Caldwell	Cabarrus	Graham
	Carteret	Chatham	Greene
	Catawba	Chowan	Hoke
	Cherokee	Columbus	Hyde
	Cumberland	Craven	Jones
	Davidson	Davie	Madison
	Durham	Duplin	Northampton
	Halifax	Edgecombe	Pamlico
	Harnett	Franklin	Perquimans
	Henderson	Gaston	Tyrrell
	Lincoln	Granville	
	Macon	Haywood	
	Martin	Hertford	
	Moore	Jackson	
	Nash	Johnston	
	New Hanover	Lee	
	Richmond	Lenoir	
	Rockingham	McDowell	
	Surry	Mitchell	
	Watauga	Montgomery	
		Onslow	
		Orange	
		Pasquotank	
		Pender	
		Person	
		Pitt	
		Polk	
		Randolph	
		Robeson	
		Rowan	
		Rutherford	
		Sampson	
		Scotland	
		Stanly	
		Stokes	
		Swain	
		Transylvania	
		Union	
		Vance	
		Warren	
		Washington	
		Wayne	
		Wilkes	
		Wilson	
		Yadkin	
		Yancey	

TOTAL Non-federal General Hospitals: 130

Based on 1983 Hospital Summary Report and N.C. Center research

Table 2.3: Federal Hospitals in North Carolina

Hospital	Location
1. Veterans Administration Medical Center	Asheville, Buncombe County
2. Naval Hospital	Camp Lejeune, Onslow County
3. U.S. Public Health Service Indian Hospital	Cherokee, Swain County
4. Naval Hospital	Cherry Point, Pamlico County
5. Veterans Administration Medical Center	Durham, Durham County
6. Veterans Administration Medical Center	Fayetteville, Cumberland County
7. Womack Army Community Hospital	Fort Bragg, Cumberland County
8. Veterans Administration Hospital	Salisbury, Rowan County
9. U.S. Air Force Hospital, Seymour Johnson	Seymour Johnson Air Force Base, Wayne County

Of the 11 facilities owned by other local governmental units, eight are operated by not-for-profit corporations, and three by the owner of the facility. Table 2.6 illustrates the various combinations of ownership and management under which North Carolina's 60 local hospitals function.

b. *Not-For-Profit.* Sixty-one of North Carolina's hospitals are owned by not-for-profit corporations. Forty-nine of these hospitals, or almost 80 percent, are managed by the corporation that owns the facility. Five facilities are part of the SunAlliance, a
—continued page 26

Table 2.4: State-Owned Hospitals in North Carolina

Hospital Name and Type	Location		Number of Beds
	City	County	
1. Alcoholic Rehabilitation Center <i>Alcohol/Drug Abuse</i>	Black Mountain	Buncombe	99
2. Broughton Hospital <i>Psychiatric</i>	Morganton	Burke	954
3. Central Prison Hospital <i>Prison</i>	Raleigh	Wake	241
4. Cherry Hospital <i>Psychiatric</i>	Goldsboro	Wayne	732
5. Dorothea Dix Hospital <i>Psychiatric</i>	Raleigh	Wake	725
6. John Umstead Hospital <i>Psychiatric</i>	Butner	Granville	777
7. Lenox Baker Children's Hospital <i>Rehabilitation</i>	Durham	Durham	40
8. McCain Hospital <i>Prison</i>	McCain	Hoke	115
9. North Carolina Alcoholic Rehabilitation Center <i>Alcohol/Drug Abuse</i>	Butner	Granville	82
10. North Carolina Memorial Hospital <i>General Acute Care</i>	Chapel Hill	Orange	595
11. Walter B. Jones Alcoholic Rehabilitation Center <i>Alcohol/Drug Abuse</i>	Greenville	Pitt	76

Table 2.5: North Carolina Hospitals Owned by Local Government Bodies (66)

Hospital	Location		Number of Beds
	City	County	
<i>County-Owned Hospitals (55)</i>			
1. Alamance County Hospital	Burlington	Alamance	141
2. Anson County Hospital	Wadesboro	Anson	96
3. Beaufort County Hospital	Washington	Beaufort	151
4. Bertie County Memorial Hospital	Windsor	Bertie	36
5. Bladen County Hospital	Elizabethtown	Bladen	62
6. The Brunswick Hospital	Supply	Brunswick	60
7. Cabarrus Memorial Hospital	Concord	Cabarrus	436
8. Carteret General Hospital	Morehead City	Carteret	118
9. Catawba Memorial Hospital	Hickory	Catawba	260
10. Chowan Hospital	Edenton	Chowan	127
11. Cleveland Memorial Hospital	Shelby	Cleveland	300
12. Kings Mountain Hospital	Kings Mountain	Cleveland	102
13. Columbus County Hospital	Whiteville	Columbus	166
14. Craven County Hospital	New Bern	Craven	254
15. Cape Fear Valley Hospital	Fayetteville	Cumberland	492
16. Davie County Hospital	Mocksville	Davie	75
17. Duplin General Hospital	Kenansville	Duplin	80
18. Durham County General Hospital	Durham	Durham	483
19. Forsyth-Stokes Community Mental Health	Winston-Salem	Forsyth	40
20. Franklin Memorial Hospital	Louisburg	Franklin	76
21. Gaston Memorial Hospital	Gastonia	Gaston	451
22. Granville Hospital	Oxford	Granville	68
23. Haywood County Hospital	Clyde	Haywood	200
24. Margaret R. Pardee Memorial Hospital	Hendersonville	Henderson	273
25. Iredell Memorial Hospital	Statesville	Iredell	182
26. Lowrance Memorial Hospital	Mooreville	Iredell	121
27. Johnston Memorial Hospital	Smithfield	Johnston	180
28. Lincoln County Hospital	Lincolnton	Lincoln	110
29. Angel Community Hospital	Franklin	Macon	81
30. Martin General Hospital	Williamston	Martin	49
31. Huntersville Hospital	Huntersville	Mecklenburg	36
32. Mecklenburg Mental Health Hospital	Charlotte	Mecklenburg	66
33. New Hanover Memorial Hospital	Wilmington	New Hanover	477
34. Onslow Memorial Hospital	Jacksonville	Onslow	150
35. Albemarle Hospital	Elizabeth City	Pasquotank	206
36. Pender Memorial Hospital	Burgaw	Pender	44
37. Pitt County Memorial Hospital	Greenville	Pitt	531
38. St. Luke's Hospital	Columbus	Polk	74
39. Hamlet Hospital	Hamlet	Richmond	60
40. North Carolina Cancer Institute	Lumberton	Robeson	56
41. Sampson County Memorial Hospital	Clinton	Sampson	156
42. Stokes-Reynolds Memorial Hospital	Danbury	Stokes	96
43. Union Memorial	Monroe	Union	180
44. Eastern Wake Hospital	Zebulon	Wake	20
45. Northern Wake Hospital	Wake Forest	Wake	20
46. Southern Wake Hospital	Fuquay-Varina	Wake	20
47. Wake County Alcoholism Treatment Center	Raleigh	Wake	34

—table continued on next page

Table 2.5: North Carolina Hospitals Owned by Local Government Bodies (66), *continued*

Hospital	Location		Number of Beds
	City	County	
<i>County-Owned Hospitals (55), continued</i>			
48. Wake County Medical Center	Raleigh	Wake	550
49. Western Wake Hospital	Apex	Wake	20
50. Warren General Hospital	Warrenton	Warren	37
51. Washington County Hospital	Plymouth	Washington	49
52. Watauga County Hospital	Boone	Watauga	141
53. Wayne County Memorial Hospital	Goldsboro	Wayne	341
54. Wilson Memorial Hospital	Wilson	Wilson	367
55. Hoots Memorial Hospital	Yadkinville	Yadkin	72
<i>Hospital Authority-Owned Hospitals (6)</i>			
56. Charlotte Memorial Hospital and Medical Center	Charlotte	Mecklenburg	853
57. Charlotte Rehabilitation Hospital	Charlotte	Mecklenburg	88
58. Murphy Medical Center	Murphy	Cherokee	170
59. Nash General Hospital	Rocky Mount	Nash	292
60. Mountain Park Medical Center	Andrews	Cherokee	61
61. University Memorial Hospital	Charlotte	Mecklenburg	130
<i>City-Owned Hospitals (2)</i>			
62. Betsy Johnson Memorial Hospital	Dunn	Harnett	107
63. Wilkes General Hospital	North Wilkesboro	Wilkes	133
<i>Hospital District-Owned Hospitals (2)</i>			
64. Halifax Memorial Hospital	Roanoke Rapids	Halifax	190
65. Northern Hospital of Surry County	Mount Airy	Surry	98
<i>Township-Owned Hospitals (1)</i>			
66. J. Arthur Doshier Memorial Hospital	Southport	Brunswick	40

Based on 1983 Hospital Summary Report and N.C. Center research

Table 2.6: Ownership and Operation of North Carolina Hospitals Owned by Local Governmental Bodies

	<i>Operated by:</i>					Not-for-Profit	Investor-Owned	Total
	County	Authority	Township	District	City			
<i>Owned by:</i>								
County	8	2	0	0	0	39	6 *	55
Authority	0	0	0	0	0	6	0	6
Township	0	0	1	0	0	0	0	1
District	0	0	0	1	0	1	0	2
City	0	0	0	0	1	1	0	2
Total	8	2	1	1	1	48	6	66

*Includes one hospital leased to an investor-owned corporation

Table 2.7: North Carolina Hospitals Owned by Not-For-Profit Corporations (61)

Hospital	Location		Number of Beds
	City	County	
1. Memorial Hospital of Alamance County	Burlington	Alamance	222
2. Alexander County Hospital	Taylorsville	Alexander	62
3. Alleghany County Memorial Hospital	Sparta	Alleghany	46
4. Ashe Memorial Hospital	Jefferson	Ashe	76
5. Charles A. Cannon Jr. Memorial Hosp.	Banner Elk	Avery	92
6. Sloop Memorial Hospital	Crossnore	Avery	38
7. Pungo District Hospital	Belhaven	Beaufort	49
8. Memorial Mission Hospital	Asheville	Buncombe	472
9. St. Joseph's Hospital	Asheville	Buncombe	283
10. Thoms Rehabilitation Hospital	Asheville	Buncombe	80
11. Grace Hospital	Morganton	Burke	161
12. Valdese General Hospital	Valdese	Burke	134
13. Caldwell Memorial Hospital	Lenoir	Caldwell	130
14. Sea Level Hospital	Sea Level	Carteret	76
15. Chatham Hospital	Siler City	Chatham	68
16. Crawley Memorial Hospital	Boiling Springs	Cleveland	60
17. Community General Hospital of Thomasville	Thomasville	Davidson	164
18. Lexington Memorial Hospital	Lexington	Davidson	94
19. Duke University Medical Center	Durham	Durham	955
20. Amos Cottage Rehabilitation Hospital	Winston-Salem	Forsyth	41
21. Forsyth Memorial Hospital	Winston-Salem	Forsyth	765
22. North Carolina Baptist Hospital	Winston-Salem	Forsyth	701
23. Fellowship Hall	Greensboro	Guilford	48
24. High Point Memorial Hospital	High Point	Guilford	302
25. L. Richardson Memorial Hospital	Greensboro	Guilford	130
26. Moses H. Cone Memorial Hospital	Greensboro	Guilford	492
27. Wesley Long Community Hospital	Greensboro	Guilford	341
28. Our Community Hospital	Scotland Neck	Halifax	20
29. Good Hope Hospital	Erwin	Harnett	72
30. Fletcher Hospital	Fletcher	Henderson	103
31. Roanoke-Chowan Hospital	Ahoskie	Hertford	140
32. C. J. Harris Community Hospital	Sylva	Jackson	80
33. Lenoir Memorial Hospital	Kinston	Lenoir	281
34. Highlands-Cashiers Hospital	Highlands	Macon	27
35. Robersonville Community Hospital	Robersonville	Martin	12
36. The McDowell Hospital	Marion	McDowell	65
37. Charlotte Treatment Center	Charlotte	Mecklenburg	64
38. Mercy Hospital	Charlotte	Mecklenburg	427
39. Presbyterian Hospital	Charlotte	Mecklenburg	580
40. Spruce Pine Community Hospital	Spruce Pine	Mitchell	88
41. Montgomery Memorial Hospital	Troy	Montgomery	90
42. Moore Memorial Hospital	Pinehurst	Moore	347
43. St. Joseph of the Pines	Southern Pines	Moore	90
44. Cape Fear Memorial Hospital	Wilmington	New Hanover	110

—table continued on next page

Table 2.7: North Carolina Hospitals Owned by Not-For-Profit Corporations (61), *continued*

Hospital	Location		Number of Beds
	City	County	
45. Person County Memorial Hospital	Roxboro	Person	77
46. Randolph Hospital	Asheboro	Randolph	145
47. Richmond Memorial Hospital	Rockingham	Richmond	
48. Southeastern General Hospital	Lumberton	Robeson	346
49. Annie Penn Memorial Hospital	Reidsville	Rockingham	152
50. Morehead Memorial Hospital	Eden	Rockingham	133
51. Rowan Memorial Hospital	Salisbury	Rowan	324
52. Rutherford Hospital	Rutherfordton	Rutherford	168
53. Scotland Memorial Hospital	Laurinburg	Scotland	165
54. Stanly Memorial Hospital	Albemarle	Stanly	130
55. Hugh Chatham Memorial Hospital	Elkin	Surry	160
56. Swain County Hospital	Bryson City	Swain	51
57. Transylvania Community Hospital	Brevard	Transylvania	104
58. Maria Parham Hospital	Henderson	Vance	100
59. Rex Hospital	Raleigh	Wake	394
60. Blowing Rock Hospital	Blowing Rock	Watauga	100
61. Burnsville Hospital	Burnsville	Yancey	24

Based on 1983 Hospital Summary Report and N.C. Center research



Table 2.8: Investor-Owned Hospitals In North Carolina

Hospital	Location		Number of beds
	City	County	
1. Appalachian Hall	Asheville	Buncombe	125
2. Highland Hospital	Asheville	Buncombe	125
3. Blackwelder Memorial	Lenoir	Caldwell	31
4. Frye Regional Medical Center	Hickory	Catawba	218
5. Hickory Memorial Hospital	Hickory	Catawba	64
6. Highsmith-Rainey Memorial	Fayetteville	Cumberland	150
7. HSA Cumberland Hospital	Fayetteville	Cumberland	154
8. Life Center of Fayetteville	Fayetteville	Cumberland	34
9. McPherson Hospital	Durham	Durham	30
10. Edgecombe General Hospital	Tarboro	Edgecombe	127
11. Medical Park Hospital	Winston-Salem	Forsyth	136
12. Charter Mandala Center	Winston-Salem	Forsyth	75
13. Charter Hills Hospital	Greensboro	Guilford	100
14. Humana Hospital Greensboro	Greensboro	Guilford	130
15. Davis Community Hospital	Statesville	Iredell	149
16. Central Carolina Hospital	Sanford	Lee	142
17. Gordon Crowell Memorial	Lincolnton	Lincoln	93
18. Orthopaedic Hospital of Charlotte	Charlotte	Mecklenburg	166
19. Charlotte Eye, Ear and Throat Hospital	Charlotte	Mecklenburg	68
20. Community Hospital of Rocky Mount	Rocky Mount	Nash	49
21. Life Center of Wilmington	Wilmington	New Hanover	27
22. HSA Brynn Marr	Jacksonville	Onslow	34
23. Life Center of Jacksonville	Jacksonville	Onslow	47
24. Holly Hill Hospital	Raleigh	Wake	108
25. Raleigh Community Hospital	Raleigh	Wake	140
26. Charter Northridge Hospital	Raleigh	Wake	66

subsidiary management company owned by the parent holding company, the not-for-profit SunHealth, Inc. based in Charlotte. One facility is run by the not-for-profit Adventist Health Systems/Sunbelt Health Care Corporation of Orlando, Florida. Investor-owned corporations manage six hospitals owned by local, independent not-for-profit corporations. Table 2.7 lists the North Carolina hospitals owned by not-for-profit corporations.

c. *Investor-Owned.* North Carolina has 26 hospitals *owned* and operated by investor-owned corporations. Two of these hospitals are independent, doctor-owned facilities. One of them (McPherson Hospital) is managed by the owning physicians; the other (Medical Park Hospital) is operated under a management contract by an investor-owned multi-hospital system. Twenty-four hospitals are owned and operated by investor-owned multi-hospital corporations. Table 2.8 identifies the state's 26 investor-owned hospitals. These hospitals are described more thoroughly in Chapter V and Appendix B; the owning companies are described in Chapter VI.

Type of Services³

One hundred and thirty of North Carolina's 164 non-federal hospitals are general, acute care facilities. These hospitals provide a wide range of care, frequently offering psychiatric services and long-term care in addition to general medical-surgical services. The remaining 34 hospitals provide a broad range of specialty care. Fourteen are psychiatric hospitals. Ten facilities specialize in the treatment of alcohol or chemical dependency. The other specialty facilities include: four rehabilitation hospitals; two eye, ear, nose, and throat hospitals; one cancer institute; one orthopedic hospital; and two prison hospitals. Table 2.9 indicates the form of ownership of North Carolina's 130 general and 34 specialty non-federal hospitals. Table 2.10 lists the state's 34 specialty hospitals.

a. *Publicly-Owned.* (i) *State.* North Carolina's 11 state-owned facilities consist primarily of specialty hospitals. Only one state hospital is a general, acute care facility. The state also owns and

Table 2.9: Ownership of General and Specialty Hospitals In North Carolina

Type of Ownership:	State	Public/ Local	Not-for-Profit	Investor-Owned	Total
<i>Type of Service:</i>					
General	1	61	57	11	130
Psychiatric	4	2	0	8	14
Alcohol/Chemical Dependency	3	1	2	4	10
Rehabilitation	1	1	2	0	4
Eye, Ear, Nose & Throat	0	0	0	2	2
Cancer	0	1	0	0	1
Orthopedic	0	0	0	1	1
Prison	2	0	0	0	2
Total	11	66	61	26	164

Based on 1983 Hospital Summary Report and N.C. Center research

operates four psychiatric hospitals, three centers for the treatment of alcohol dependency, two prison hospitals, and North Carolina's only children's hospital — a rehabilitation hospital in Durham.

The state of North Carolina also owns and operates five centers for the mentally retarded. All five centers have infirmaries (and one infirmary — at Western North Carolina Center in Morganton — is certified by the Joint Commission on Accreditation of Hospitals). However, none of these centers is considered to be a hospital for purposes of this report since the small amount of hospital-type medical treatment is incidental to the purpose of residential care and training offered to these patients.

(ii) *Local*. Sixty-one of North Carolina's 66 local, publicly-owned hospitals are general, acute care facilities. Local governmental bodies also own two psychiatric hospitals (Forsyth and Mecklenburg counties), one alcohol dependency treatment center (Wake County), one rehabilitation hospital (Charlotte-Mecklenburg Hospital Authority), and the state's only hospital devoted to the treatment of cancer patients (Robeson County).

b. *Not-For-Profit*. Like the local publicly-owned hospitals in North Carolina, the state's not-for-profit facilities are primarily general, acute care hospitals. Fifty-seven of the 61 hospitals owned by not-for-profit corporations are general hospitals; the remainder consist of two rehabilitation hospitals and two centers for the treatment of alcohol dependency.

c. *Investor-Owned*. Over half of the 26 investor-owned hospitals in North Carolina are

specialty facilities: eight psychiatric hospitals; four for the treatment of chemical dependency; two eye, ear, nose, and throat hospitals; and one orthopedic hospital. Investor-owned corporations also own 11 general, acute care hospitals in North Carolina.

As noted above, 11 hospitals are managed under contract by investor-owned corporations; an additional facility is operated by an investor-owned corporation through a leasing arrangement. All 12 facilities are general, acute care hospitals.

Size⁴

The size of North Carolina's 164 non-federal hospitals, measured by the number of beds in use, ranges from a low of 12 beds at Robersonville Community Hospital, a general hospital in Martin County, to a high of 946 beds at Broughton Hospital, a state-owned psychiatric facility in Burke County. Seventy-three of North Carolina's 164 non-federal hospitals, or 45 percent, have fewer than 100 beds, and are generally considered "small" hospitals. Thirty-one of these 73 hospitals have fewer than 50 beds. Seventy-one of the state's 164 non-federal hospitals, or 43 percent, are "medium-sized" hospitals, having between 100 and 399 beds. Fifty-one hospitals have between 100 and 199 beds, 11 have between 200 and 299 beds, and nine have between 300 and 399 beds. The 20 remaining non-federal hospitals have 400 or more beds each, and are considered "large" hospitals. Table 2.11 provides summary data on the sizes of

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Table 2.10: Specialty Hospitals In North Carolina

	Location		Type of Ownership
	City	County	
PSYCHIATRIC HOSPITALS (14)			
1. Appalachian Hall	Asheville	Buncombe	I-O ¹
2. Highland Hospital	Asheville	Buncombe	I-O
3. Broughton Hospital	Morganton	Burke	State
4. HSA Cumberland Hospital	Fayetteville	Cumberland	I-O
5. Charter Mandala Center	Winston-Salem	Forsyth	I-O
6. Forsyth-Stokes Community Mental Health Center	Winston-Salem	Forsyth	County
7. John Umstead Hospital	Butner	Granville	State
8. Charter Hills Hospital	Greensboro	Guilford	I-O
9. Mecklenburg Mental Health Hospital	Charlotte	Mecklenburg	County
10. HSA Brynn Marr Hospital	Jacksonville	Onslow	I-O
11. Dorothea Dix Hospital	Raleigh	Wake	State
12. Holly Hill Hospital	Raleigh	Wake	I-O
13. Cherry Hospital	Goldsboro	Wayne	State
14. Hickory Memorial Hospital	Hickory	Catawba	I-O
ALCOHOL/CHEMICAL DEPENDENCY TREATMENT HOSPITALS (10)			
15. Alcoholic Rehabilitation Center	Black Mtn.	Buncombe	State
16. Life Center of Fayetteville	Fayetteville	Cumberland	I-O
17. North Carolina Alcoholic Rehabilitation Center	Butner	Granville	State
18. Fellowship Hall	Greensboro	Guilford	NFP ²
19. Charlotte Treatment Center	Charlotte	Mecklenburg	NFP
20. Life Center of Wilmington	Wilmington	New Hanover	I-O
21. Life Center of Jacksonville	Jacksonville	Onslow	I-O
22. Walter B. Jones Alcohol Rehabilitation Center	Greenville	Pitt	State
23. Wake County Alcoholism Treatment Center	Raleigh	Wake	County
24. Charter Northridge	Raleigh	Wake	I-O
REHABILITATION HOSPITALS (4)			
25. Thoms Rehabilitation Hospital	Asheville	Buncombe	NFP
26. Amos Cottage Rehabilitation Hospital	Winston-Salem	Forsyth	NFP
27. Charlotte Rehabilitation Hospital	Charlotte	Mecklenburg	Authority
28. Lenox Baker Children's Hospital	Durham	Durham	State
EYE, EAR, NOSE, AND THROAT HOSPITALS (2)			
29. McPherson Hospital	Durham	Durham	I-O
30. Charlotte Eye, Ear and Throat Hospital	Charlotte	Mecklenburg	I-O
CANCER INSTITUTE (1)			
31. North Carolina Cancer Institute	Lumberton	Robeson	County
ORTHOPEDIC HOSPITAL (1)			
32. Orthopaedic Hospital of Charlotte	Charlotte	Mecklenburg	I-O
PRISON HOSPITALS (2)			
33. Central Prison Hospital	Raleigh	Wake	State
34. McCain Hospital	McCain	Hoke	State

¹ I-O - Investor-owned² NFP - Not-for-profit

Based on 1983 Hospital Summary Report and N.C. Center research

Table 2.11: Size Of North Carolina Non-Federal Hospitals Measured by Beds in Use

Type of Ownership	State		Public/ Local		Not-for- Profit		Investor- Owned		Total
	G	S	G	S	G	S	G	S	
<i>Number of Beds in Use:</i>									
<i>Small</i>									
Less than 50	0	1	12	2	7	2	2	5	31
50-99	0	3	14	3	15	2	1	4	42
<i>Medium</i>									
100-199	0	1	18	0	19	0	7	6	51
200-299	0	1	6	0	3	0	1	0	11
300-399	0	0	3	0	6	0	0	0	9
<i>Large</i>									
400-499	0	0	5	0	3	0	0	0	8
500 or more	1	4	3	0	4	0	0	0	12
TOTAL	1	10	61	5	57	4	11	15	164

G - General Hospital

S - Specialty Hospital

Based on 1983 Hospital Summary Report and N.C. Center research

North Carolina's 164 non-federal hospitals.

a. **Publicly-Owned.** (i) *State.* State-owned hospitals generally are larger than hospitals owned by other governmental units, not-for-profit corporations, and investor-owned corporations. Five of the 11 state-owned facilities have over 500 beds. One state hospital has fewer than 50 beds, three between 50 and 99 beds, one between 100 and 199 beds, and one between 200 and 299 beds.

(ii) *Local.* Nearly 75 percent of the state's 66 local, government-owned hospitals have fewer than 200 beds. Thirty-one facilities are "small" (fewer than 100 beds); 27 hospitals are "medium-sized" (100-399 beds); and five hospitals are "large" (more than 400 beds).

The average bed size of publicly-owned hospitals overall is 202 beds. For state-owned hospitals only, the average hospital has 403 beds; locally-owned public hospitals have an average of 168 beds.

b. **Not-For-Profit.** The size distribution of not-for-profit hospitals is similar to that for local public facilities. Thirty-six of the 61 hospitals owned by not-for-profit corporations have fewer than 100 beds; another 28 are "medium-sized" (100 to 399 beds). Only 7 not-for-profit hospitals have more than

400 beds. The average bed size for not-for-profit hospitals is 186 beds.

c. **Investor-Owned.** Hospitals owned and operated by investor-owned corporations are notable for their relatively small size. None of North Carolina's 26 investor-owned hospitals is "large" (more than 400 beds); in fact, the largest investor-owned facility is the 218-bed Frye Regional Medical Center in Catawba County. Twelve of the state's 26 investor-owned hospitals are "small" (fewer than 100 beds); the other 14 facilities are in the 100 to 399-bed "medium-sized" range. The average bed size for investor-owned hospitals is 100-beds.

With only one exception, the 11 hospitals managed under contract by investor-owned corporations also are "small" and "medium-sized" facilities. Eight hospitals have fewer than 100 beds; three facilities have between 100 and 399 beds. The largest hospital managed under contract by an investor-owned corporation is Cape Fear Valley Hospital, a 492-bed general hospital in Cumberland County. The average bed-size for hospitals *managed* by investor-owned companies is 124 beds. The average for hospital-owned and managed by investor-owned companies is 107 beds.

Multi-Hospital Systems in North Carolina

Seventy-one of North Carolina's 164 nonfederal hospitals, or 34 percent, are affiliated with a multi-hospital system. Thirty-one of these 71 facilities are owned and operated by a multi-hospital system; 40 are managed under contract by a system. Tables 2.12-2.15 summarize multi-hospital activity in the state, and identify the type of systems involved and the relationship between hospitals and systems.

Two public multi-hospital systems are active in North Carolina. Five hospitals are operated by the Wake County Hospital System; four others are part of the Charlotte-Mecklenburg Hospital System. Table 2.12 lists the hospitals operated by North Carolina's public multi-hospital systems.

Three private not-for-profit multi-hospital systems also operate in North Carolina. The Sisters of Mercy hospital system, based in Belmont, N.C., owns and operates two hospitals. The Sisters of Mercy system has no hospitals outside of North Carolina. Fletcher Hospital is operated by Adventist Health Systems/Sunbelt Health Care corporation of Orlando, Florida.

The state's most active private not-for-profit multi-hospital system is SunHealth, Inc. based in Charlotte. SunHealth is a holding company that has several wholly-owned subsidiaries. One of these sub-

sidaries manages hospitals under contract — the SunAlliance which manages *small and medium-sized* hospitals. A second subsidiary — the SunHealth Network — offers management consulting to *large* hospitals. SunHealth leases and operates one North Carolina hospital, Mountain Park Medical Center in Andrews. With this one exception, SunHealth companies engage solely in hospital management (and some other support services), not ownership. In North Carolina, the SunAlliance manages a total of 17 hospitals under contract. The SunHealth Network serves an additional six North Carolina hospitals by providing many shared services and meeting resource needs that are unique to larger hospitals. SunHealth, Inc. is active in nine other Southern states and is discussed in greater detail in Chapter VI. Table 2.13 also lists the North Carolina hospitals that are managed by SunAlliance or are part of the SunHealth Network.

Eleven investor-owned multi-hospital systems are active in North Carolina, owning and operating or managing under contract a total of 38 hospitals. Only one of these 11 investor-owned systems, Hospital Corporation of America, both owns and manages hospitals in North Carolina. Seven systems operate in the state only as hospital owners and operators; three investor-owned systems are engaged exclusively as hospital managers. A twelfth investor-owned system, Community Psychiatric Centers, is

Table 2.12: Public Multi-Hospital Systems Active In North Carolina

System	City	Number of Beds
WAKE COUNTY HOSPITAL SYSTEM		
1. Western Wake Hospital	Apex	20
2. Southern Wake Hospital	Fuquay-Varina	20
3. Wake County Medical Center	Raleigh	550
4. Northern Wake Hospital	Wake Forest	20
5. Eastern Wake Hospital	Zebulon	20
	TOTAL	630
CHARLOTTE-MECKLENBURG HOSPITAL AUTHORITY		
1. Charlotte Memorial Hospital	Charlotte	853
2. Charlotte Rehabilitation Hospital	Charlotte	88
3. Huntersville Hospital	Huntersville	361
4. University Memorial Hospital	Charlotte	130
	TOTAL	1,432

Based on 1983 Hospital Summary Report and N.C. Center research

Table 2.13: Not-For-Profit Multi-Hospital Systems Active in North Carolina

System/Hospital	City	County	Number of Beds
SISTERS OF MERCY HOSPITAL SYSTEM			
1. St. Joseph's Hospital	Asheville	Buncombe	283
2. Mercy Hospital	Charlotte	Mecklenburg	427
		TOTAL	510
SUNALLIANCE			
1. Alamance County Hospital	Burlington	Alamance	141
2. Anson County Hospital	Wadesboro	Anson	96
3. Beaufort County Hospital	Washington	Beaufort	151
4. Bertie County Memorial Hospital	Windsor	Bertie	36
5. Sea Level Hospital	Sea Level	Carteret	76
6. Chatham Hospital	Siler City	Chatham	68
7. Mountain Park Medical Center	Andrews	Cherokee	61
8. Murphy Medical Center	Murphy	Cherokee	50
9. Chowan Hospital	Edenton	Chowan	127
10. Granville Hospital	Oxford	Granville	68
11. L. Richardson Memorial Hospital	Greensboro	Guilford	130
12. Hamlet Hospital	Hamlet	Richmond	60
13. Pender Memorial Hospital	Burgaw	Pender	44
14. Memorial Hospital of Alamance	Burlington	Alamance	222
15. Thoms Rehabilitation Center	Asheville	Buncombe	80
16. Martin General Hospital	Williamston	Martin	49
17. L.C. Hoots Memorial Hospital	Yadkinville	Yadkin	72
		TOTAL	1,531
SUNHEALTH NETWORK			
1. Durham County General Hospital	Durham	Durham	483
2. Memorial Mission Hospital	Asheville	Buncombe	472
3. Moses H. Cone Hospital	Greensboro	Guilford	492
4. New Hanover Memorial Hospital	Wilmington	New Hanover	477
5. North Carolina Baptist Hospital	Winston-Salem	Forsyth	701
6. Presbyterian Hospital	Charlotte	Mecklenburg	580
		TOTAL	3,205
ADVENTIST HEALTH SYSTEMS/SUNBELT HEALTH CARE COPORATION			
1. Fletcher Hospital	Fletcher	Henderson	103

Based on 1983 Hospital Summary Report and N.C. Center research

scheduled to begin activity in North Carolina upon completion of its new psychiatric facility in Pineville (Mecklenburg County). Tables 2.14 and 2.15 list the investor-owned multi-hospital systems operating in North Carolina and the hospitals affiliated with each.

¹ *Hospital Summary Report: 1983 Data, Health Facilities Data Book*, State Center for Health Statistics, N.C. Department of Human Resources, Division of Health Services, (Raleigh, N.C., September 1984), pp. 1-9.

² *Ibid.*, pp. 1-355; 1985 *Directory of Investor-Owned Hospitals and Hospital Management Companies*, Federation of American Hospitals (FAH Review, Inc., Little Rock, Arkansas, 1985); *American Hospital Association Guide to the Health Care Field, 1984 Edition*, American Hospital Association (Chicago, Illinois, 1984); Interviews conducted by the N. C. Center staff and interns.

³ *Op. cit.*, *Hospital Summary Report: 1983 Data, Health Facilities Data Book*.

⁴ *Ibid.*

Table 2.14: Multi-Hospital Systems Active In North Carolina (Hospital Owners)

	City	County	Number of Beds
<i>AMERICAN MEDICAL INTERNATIONAL, INC. (4)</i>			
1. Central Carolina Hospital	Sanford	Lee	142
2. Community Hospital of Rocky Mount	Rocky Mount	Nash	49
3. Frye Regional Medical Center	Hickory	Catawba	218
4. Gordon Crowell Memorial Hospital	Lincolnton	Lincoln	93
		TOTAL	492
<i>CHARTER MEDICAL CORPORATION (3)</i>			
5. Charter Hills Hospital	Greensboro	Guilford	100
6. Charter Mandala Center	Winston-Salem	Forsyth	75
7. Charter Northridge Hospital	Raleigh	Wake	66
		TOTAL	241
<i>HEALTHCARE SERVICES OF AMERICA, INC. (5)</i>			
8. HSA Brynn Marr Hospital	Jacksonville	Onslow	34
9. HSA Cumberland Hospital	Fayetteville	Cumberland	154
10. Life Center of Fayetteville	Fayetteville	Cumberland	34
11. Life Center of Jacksonville	Jacksonville	Onslow	47
12. Life Center of Wilmington	Wilmington	New Hanover	27
		TOTAL	296
<i>HOSPITAL CORPORATION OF AMERICA (6)</i>			
13. Davis Community Hospital	Statesville	Iredell	149
14. Edgecombe General Hospital	Tarboro	Edgecombe	127
15. Highsmith-Rainey Memorial Hospital	Fayetteville	Cumberland	150
16. Holly Hill Hospital	Raleigh	Wake	108
17. Orthopaedic Hospital of Charlotte	Charlotte	Mecklenburg	166
18. Raleigh Community Hospital	Raleigh	Wake	140
		TOTAL	840
<i>HUMANA, INC. (2)</i>			
19. Charlotte Eye, Ear and Throat Hospital	Charlotte	Mecklenburg	68
20. Humana Hospital Greensboro	Greensboro	Guilford	130
		TOTAL	198
<i>PSYCHIATRIC INSTITUTES OF AMERICA (2)</i>			
21. Appalachian Hall	Asheville	Buncombe	125
22. Highland Hospital	Asheville	Buncombe	125
		TOTAL	250
<i>UNITED MEDICAL CORPORATION (1)</i>			
23. Hickory Memorial Hospital	Hickory	Catawba	64
<i>HEALTH CARE MANAGEMENT CORPORATION (1)</i>			
24. Blackwelder Memorial Hospital	Lenoir	Caldwell	31

Based on 1983 Hospital Summary Report and N.C. Center research

**Table 2.15: Investor-Owned Multi-Hospital Systems Active In North Carolina
(Hospital Managers)**

	City	County	Number of Beds
<i>HOSPITAL CORPORATION OF AMERICA (10)</i>			
1. Burnsville Hospital	Burnsville	Yancey	24
2. Ashe Memorial Hospital	Jefferson	Ashe	76
3. Spruce Pine Community Hospital	Spruce Pine	Mitchell	88
4. Franklin Memorial Hospital	Louisburg	Franklin	76
5. Johnston Memorial Hospital	Smithfield	Johnston	180
6. Lowrance Memorial Hospital	Mooresville	Iredell	121
7. Angel Community Hospital	Franklin	Macon	84
8. Person County Memorial Hospital	Roxboro	Person	77
Also,			
9. The Brunswick Hospital (leased)	Supply	Brunswick	60
10. Medical Park Hospital (physician-owned)	Winston-Salem	Forsyth	136
		TOTAL	887
<i>HOSPITAL MANAGEMENT PROFESSIONALS (1)</i>			
11. Morehead Memorial Hospital	Eden	Rockingham	133
<i>NATIONAL MEDICAL ENTERPRISES (1)</i>			
12. Cape Fear Valley Hospital	Fayetteville	Cumberland	492
<i>THE DELTA GROUP (1)</i>			
13. The McDowell Hospital	Marion	McDowell	65

Based on 1983 Hospital Summary Report and N.C. Center research

PART II

Chapter III **Factors Affecting Changeovers**

Chapter IV **Competition: Other Actors on the Health Care Stage**

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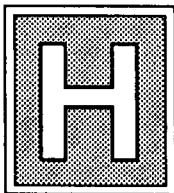
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CHAPTER III

FACTORS AFFECTING THE CHANGEOVER TO INVESTOR OWNERSHIP

by Julie McCullough and William Haflett



Single community hospitals are an important part of health care delivery in North Carolina. In 48 counties in the state, there is only one hospital. In 23 additional counties, there are only two hospitals. (See Table 2.1, page

19.) Many of these hospitals remain unaffiliated with multi-institutional arrangements of any sort. Montague Brown and Barbara P. McCool, two experts in hospital management options, believe that each community hospital will be faced with the decision to join, or sell to, a multi-institutional arrangement. They further conclude that the option to remain unaffiliated can be preserved through careful planning.¹

Understanding hospitals' various management options requires examining the factors affecting the changeover from single, free-standing hospital status to participation in multi-institutional arrangements, and, in particular, affiliation with the investor-owned segment of this larger group.

The rapid expansion of the investor-owned segment of the American hospital industry over the last 10 years has prompted speculation about the factors underlying this growth. Clearly, the hospital of the 1980s operates in a very complex environment. Public pressure to control escalating health care costs has led to legislative cost containment initiatives.² Hospitals must cope with regulatory controls, competition from other health care providers, capital funding problems, and political pressures.

Cash flow problems. Many hospital expenses are fixed, i.e., the hospital must pay salaries,

utilities, supply bills, and the like, and these expenses must be paid even when the facility is not filled to capacity and generating its maximum potential income. A low average daily census of patients can create critical cash flow problems for a hospital. A hospital with a cash flow problem can apply for loans from local lending institutions,* but because a hospital is often a major employer in a community, a bank must be cautious about the level of indebtedness it will allow a hospital to incur. A bankrupt hospital with a large outstanding debt at the local bank could put that bank in a financial bind and jeopardize the financial stability of an entire community. Affiliation with a multi-institutional hospital management company could provide new and more diverse borrowing sources for a hospital to use during a tight cash flow situation.

Replacing and updating aging hospital facilities. Many North Carolina hospitals were built 20 to 30 years ago using federal Hill-Burton funds and are now in need of major renovation or replacement. With the discontinuation of Hill-Burton funding in 1976, federal funds are no longer available for capital improvement projects. Hospitals must modernize facilities and acquire new equipment in order to attract physicians and patients. Obtaining the capital needed for such projects is one of the most pressing problems facing hospitals today.

* In North Carolina, only hospital authorities may borrow for cash flow. Other hospitals do not have that authority.

Lack of reserves for capital improvements. Each year, hospital facilities and equipment wear out a little at a time, or become technically obsolete. In order to build up adequate savings to have enough money on hand when the time comes to replace a building or piece of equipment, a portion of the value of hospital building or equipment should be allocated as an expense item each fiscal year, as if the hospital actually paid out that money to a creditor. These funds for depreciation should be set aside to meet future capital requirements.

Sometimes these depreciation reserves are not created or, once created, are depleted. Public or not-for-profit hospitals often perceive their mission to be to offer health care to the community at the lowest possible charges. The administrators and trustees of these hospitals may not know they should fund depreciation or may choose to generate insufficient revenues through patient charges to create enough surplus to fund depreciation.

Lewis Ridgeway, administrator of Hospital Corporation of America's (HCA) Edgecombe General Hospital in Tarboro, was also administrator of the hospital before the county sold it in 1980. He has had experience in both the public and investor-owned sectors. Ridgeway said that as a public hospital administrator, he was "sort of caught between, because the board of trustees at a public hospital ...tells the administrator on one side, 'You've got to operate in the black.' And on the other side it says, 'You've got to keep your charges low.' So it becomes a very complex operation when you are trying to keep your charges low and stay in the black at the same time."

Some trustees and county officials may choose not to fund depreciation because of public pressure to avoid surpluses of funds at the hospital at the end of the year. If a reserve fund for depreciation is created, it sometimes may not survive over the long-term. If a hospital experiences revenue shortfalls, it may be forced to use depreciation reserves to meet routine operating expenses.

Inability or reluctance to use bonds.

Even though public and not-for-profit hospitals are eligible to raise money through tax-exempt bonds, many have insufficient operating revenues to service bond interest payments. Public hospital facilities may be financed through general obligation bonds issued by the owning county or city. Some hospital boards and units of local government resist using general obligation bonds because voter approval is required, and they fear taxpayer resistance to increasing government fiscal commitments. (See sidebar on types of bonds available in North Carolina on pages 40-41.)

Changes in Medicare payments. Until late 1983, the federal Medicare program paid 80

percent of covered hospital care based on the hospital's actual costs of delivering the care. When a hospital agreed to accept Medicare patients, it knew that it would not be completely reimbursed for the care. The Medicare system had few cost containment incentives and for this reason, and many others, hospital care costs were increasing at more than twice the rate of inflation for several years. On October 1, 1983, the Medicare system began paying for covered hospital care *prospectively*, based on the hospital's historical costs and other factors.³ (See Chapter IV, Section 4 for more discussion of this new method of payment for Medicare patients.) Under this prospective payment system, the long-term viability of many hospitals may be in question. (See sidebar on page 50 about recent hospital closings in North Carolina.)

Increased governmental regulation. The regulation of hospitals through the Certificate of Need program (see sidebar on page 44), licensure of hospitals at the state level, and federal programs such as Medicare and Medicaid have all been established in recent years. The hospital operates in a much more stringent regulatory environment that it did 20 years ago, and, as a result, the job of the hospital administrator has become much more difficult. Higher levels of administrator training and better administrative support structures are in greater demand and more expensive.

Reduced admissions and length of stay. In the last few years, the length of the required hospital stay for many illnesses and procedures has decreased significantly⁴ due to the new federal DRG payment system (See sidebar in Chapter 4, Section 4 on page 93). In more recent months, the number of persons admitted to the hospital has also decreased substantially.⁵ Decreases in the number of admissions and the length of stay can mean significant decreases in hospital revenues. There are several possible reasons for these trends. Changes in physician practice patterns, improvements in health care technology, and refinements in the treatment of many medical conditions are contributing to these trends. Employers who must pay rapidly increasing costs of employee hospital benefits are also putting pressure on insurers to help bring the costs of health care down. Reducing the length of stay and number of admissions are ways to meet this demand. (See Chapter IV, Sections 1 and 4 for more discussion of these trends.)

Competition. Industry experts believe that hospitals and alternative health care facilities and services, such as ambulatory care clinics or home health agencies, will compete more openly for patients and patient revenues. Hospital administrators must be able to develop and implement innovative services and programs if they are to be successful in

this environment. (A more detailed look at the types of health care providers competing with hospitals can be found in Chapter IV.)

Larger elderly population. The number of elderly persons in the United States and North Carolina is growing rapidly. The elderly use more hospital services than do younger age groups; in addition, they increase the demand for new services such as home health care. (See the Center's quarterly magazine, *North Carolina Insight*, Vol. 8, No. 1, for more on health care for the elderly in N.C.)

More expensive technology. Rapid development and subsequent acquisition of expensive medical technological devices increase health care costs.

Physician and staff recruitment. Teaching facilities often have the latest equipment

and technology with which to train their medical students, interns, residents, nurses, and laboratory staff. Newly trained administrative staff are accustomed to having access to sophisticated computers and cost control mechanisms. Competition for good medical and administrative staffs is keen and, in order to attract and retain these staffs, hospitals must be able to offer the potential for providing the up-to-date work setting professionals expect.

Possible Reasons for North Carolina Hospitals to Join Investor-Owned Systems

Many experts believe that hospitals have been joining investor-owned multi-hospital systems in

—continued page 42

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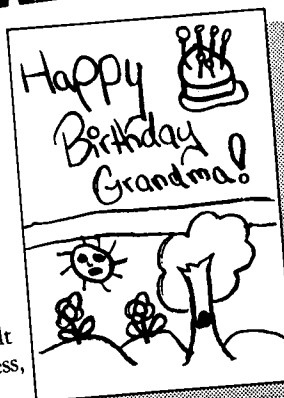
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ISSUANCE OF BONDS AS A CAPITAL FUNDRAISING TOOL FOR HOSPITALS

by Lacy Maddox

For any organization, funds required for capital projects can be obtained from income generated by operations, from borrowing, from the sale of part of the ownership of the organization, or from solicitation of donations.¹ An often-used method of raising capital for hospital building, replacement, remodeling, or new equipment acquisition is the issuance of bonds. This method of borrowing is attractive to those hoping to raise capital since it allows an organization to pay back the indebtedness over a long period of time, thereby building the costs of the payback into the rates that are charged by the organization, and without giving up ownership of the organization's assets. Bonds are attractive to those willing to lend money since the issuance of bonds is regulated at the federal and state level and future income from the bond repayment is virtually guaranteed. Another benefit to the person purchasing the bonds is that the interest earned on most government-issued bonds is not subject to income tax.²

Publicly-owned corporations, including hospital management companies, may issue bonds to raise capital. The issuance of these bonds is regulated by the federal Securities and Exchange Commission (SEC) so that there is a large degree of confidence in these as investments. However, the bonds issued through this private-sector mechanism are not tax-free, and, therefore, are not as attractive to some investors. They usually pay interest at a higher rate to encourage investors to overcome any reluctance to purchase that may result from the potential tax liability. Privately-owned or closely-held corporations may also raise money through the issuance of bonds. However, meeting the requirements of the SEC for bond approval can be very expensive, and few small corporations can afford to use this method of fundraising.

Local governments may use the issuance of bonds as a fundraising tool for many projects, including public hospitals. Before a public hospital can seek approval of a bond issue of any type, it must show a need for the project through

the Certificate of Need process (see sidebar on page 44).

Local governments can issue two types of bonds — general obligation (GO) or revenue. The North Carolina Constitution states in Article V, Section 4 that a local governmental unit cannot “contract debts secured by a pledge of its faith and credit” unless the debt is approved by a majority of the voters in the local government's jurisdiction in a referendum on the question. By their affirmative vote, the people agree to be taxed, if necessary, to pay back the bond. As the county retires its outstanding debt, the county commissioners may issue a GO bond without the approval of the county's voters up to 2/3 of the net debt reduction in the previous fiscal year. However, in most instances, GO bond issues are placed before the voters for their approval. Local government general obligation bond debt for N.C. hospitals on June 30, 1985 totaled \$149,910,011, for 43 units of government.

Local governments may also issue revenue bonds to raise capital needed to pay for capital expenditures, including hospitals. For these types of bonds, the “faith and credit” of the county or other local governmental unit is not put on the line and, therefore, there is no requirement for a vote of the people in a referendum. The local governmental unit that issues the bond promises that the bond principal and interest will be paid to the bondholders from the revenues generated by the capital project built from the proceeds of the bond issue. The bondholders have certain safeguards built in to protect their investments in case revenues are not great enough to pay back the bonds. Hospital revenue bond debt for N.C. hospitals on June 30, 1985 amounted to \$87,932,600 for 13 units.

However, since there is more risk involved in this kind of investment as compared with a GO bond, interest rates are generally higher for revenue bonds and projects funded through this method are more expensive. “On average, the revenue bonds require 40% more debt to be issued to cover

—continued next page

legally required reserves," according to John M. Barnes, Assistant Director of the State and Local Government Finance Division of the Department of the State Treasurer, which regulates the issuance of local government bonds. For this reason, state and local governmental officials are very conservative in their use of the revenue bond funding method even though there is no risk of actual defeat of a bond proposal at the polls.

Barnes and J. D. Foust, Deputy State Treasurer, said in an interview that both GO and revenue bonds can, and should, be repaid out of hospital revenues. Despite this, votes on the question of whether a GO bond is approved often turn into a tax issue. Even though the hospital would repay the GO bonds out of hospital revenues, some communities fear that overall property taxes will increase.

Both GO and revenue bonds issued by local governments for hospitals (and other capital projects) must be approved by the North Carolina Local Government Commission. The commission regulates the indebtedness of each local governmental unit in North Carolina and, therefore, must approve the issuance of both GO and revenue bonds for publicly-owned hospitals. As a result of the high level of control exerted by the Local Government Commission, local government bonds issued in North Carolina are among the most attractive securities in the nation. Foust explains the situation as follows: "North Carolina bonds have consistently sold below the national market. One of the main reasons for that is constant surveillance of the fiscal affairs of all debt issuers by the Local Government Commission and the follow-up monitoring of debt by the Commission. No bonds of the state of North Carolina or any of its units of local government have been in default since the depression era of the 1930s."

Not-for-profit hospitals in North Carolina may also finance capital improvements through the issuance of revenue bonds. As with public hospitals, not-for-profit hospitals must show the need for the project through the Certificate of Need process. In addition, the hospital must have a feasibility study done; these can be done by any nationally recognized hospital feasibility consultant, usually by one of the "Big Eight" accounting firms.³ The bonds are issued by the North Carolina Medical Care Commission in the Department of Human Resources and must be approved by this commission and the Local Government Commission in the Department of State Treasurer.

Issuance of revenue bonds by not-for-profit hospitals is specifically allowed by Article V, Section 8 of the North Carolina Constitution. Again, these bonds are repaid by the revenues generated by the facility that is built or remodeled with the proceeds from the bond. Also, the bondholders have safeguards built into their contract with the not-for-profit hospital to protect the lenders should the hospital default on the bond. Not-for-profit revenue bond debt as of June 30, 1985 totaled \$394,420,981, aiding 38 hospitals in North Carolina.

A financing method that is available to investor-owned companies in some states to raise capital for hospital construction is the state- or locally sponsored **industrial development bond**. Industrial development bonds are tax-exempt bonds that are used to help bring private businesses to underserved areas of a state. These types of bonds are not available to investor-owned hospitals in North Carolina. As a result, according to Ed Childs of Hospital Corporation of America in Nashville, TN, when North Carolina "chose not to allow the avenue of industrial development bonds to go to hospitals" the state lost "virtually all of its for-profit hospitals, especially the small ones where a couple of individuals owned them and couldn't borrow any money." Childs contrasts North Carolina's approach with that of Virginia, a state which allows hospitals to benefit from industrial development bonds, where there are "dozens of places where there are no city/county hospitals. They are all for-profit hospitals because there was a method to stay in business."

¹For a look at the sizable donations hospitals receive from foundations and corporations in N.C., see the Center's report on *Grantseeking in North Carolina* (1985), particularly pp. 11, 18, and 620-621.

²Many of these benefits of tax-exempt bond financing would be eliminated under the tax reform proposal submitted by President Reagan to Congress in 1985. See Clay Mickel, "Not-for-Profits Hurt by Treasury II Plan," *Hospitals*, Vol. 59, No. 13, July 1, 1985, p. 28.

³Arthur Andersen & Co.; Arthur Young & Co.; Coopers & Lybrand; Ernst & Whinney; Deloitte, Haskins & Sells; Peat, Marwick, Mitchell & Co.; Price Waterhouse & Co.; Touche Ross & Co. "Are the Big 8 Increasing Their Share?" *Account Audit Finance*, Winter 1984, pp. 178-181.

order to resolve many of the problems outlined above. Participation in a multi-hospital system may enable a hospital to realize cost savings on equipment and supplies through bulk purchasing programs. Many systems offer ready access to capital needed for hospital construction, renovation, or expansion. Multi-hospital systems often provide professional recruiting services for hospitals experiencing difficulty attracting qualified personnel. Multi-hospital system proponents also contend that member hospitals are able to take advantage of corporate staff expertise in implementing materials handling systems, quality assurance programs, reimbursement systems, personnel management programs, Certificate of Need planning, and a host of other control and managerial techniques and tools.

Two hypotheses were suggested in interviews as possible reasons North Carolina hospitals join investor-owned multi-hospital systems. As part of this research, the Center tested two hypotheses.

Hypothesis 1: Public hospitals are more likely to join investor-owned hospital systems than are not-for-profit or independent proprietary hospitals.

Finding 1: Not true so far in North Carolina. However, future sales to investor-owned systems would have to be of not-for-profit and public hospitals since there is only one remaining investor-owned hospital that is independent of a multi-institutional investor-owned corporation.

Many of the fears regarding the proliferation of investor-owned hospitals have focused on the possible loss of community control over local health care services. Many people believe that public hospitals are most vulnerable to the problems listed above, particularly in the area of funding capital projects. Because of this, these same people assume that public hospitals would be most likely to join a multi-hospital system.

North Carolina's experience up to 1985 has not supported this hypothesis. Of the 26 hospitals owned and operated by investor-owned hospital corporations, only three were formerly public hospitals: Central Carolina Hospital in Sanford, Edgecombe General in Tarboro, and Highsmith-Rainey Memorial in Fayetteville. Only four others were not-for-profit (but not public) facilities prior to their acquisition; the other 19 hospitals were always for-profit operations — either built by the current owner or operated for-profit by the previous owners. Of the 12 hospitals managed under contract by investor-owned companies, six are owned by not-for-profit corporations, and six are publicly owned.

Public hospital affiliation with investor-

owned hospital systems is a relatively recent phenomenon in North Carolina. Prior to 1980, only one public hospital was part of an investor-owned system. The three formerly public hospitals acquired by investor-owned systems — Central Carolina Hospital (formerly Lee County Hospital), Edgecombe General, and Highsmith-Rainey — were purchased in 1980, 1982, and 1983 respectively. Similarly, five of the six public hospitals that are managed under contract entered their agreements after 1979. The timing of the public hospital acquisitions suggests to some observers that the corporations active in North Carolina became interested in acquiring public hospitals only after investing first in the state's proprietary hospitals. It is likely that local resistance to investor-ownership of community hospitals, the presence of a strong not-for-profit multi-hospital system, and the investment preferences of hospital corporations have contributed to the manner in which multi-hospital systems have developed in North Carolina. *However, for the future, the only way for investor-owned systems to expand their holdings in the state is through acquisition of either public or not-for-profit hospitals.*

Hypothesis 2: A public or not-for-profit hospital's decision to join an investor-owned system frequently follows the defeat of a local hospital bond referendum.

Finding 2: Not true.

One of the most commonly cited benefits of an investor-owned system is the ready availability of capital needed for hospital expansion, renovation, or construction. Investor-owned corporations are able to raise capital through the sale of shares of stock in their corporations. And, through the issuance of corporate bonds, they also have tremendous borrowing power. Since governmental tax-exempt bond issues are a major source of financing for public and not-for-profit hospitals' capital projects, the Center examined whether there was a relationship between hospital bond referendum defeats and hospital affiliation with an investor-owned system. That is, the Center sought to establish whether North Carolina hospitals would turn to investor-owned systems for financing through the private-sector stock market once this avenue of tax-exempt bond financing was cut off. Based on the available evidence, it appears that no significant relationship exists between these two events (see Table 3.1).

Between November 1970 and April 1983, 36 counties presented hospital bond referenda to the voters. Referenda in only 7 counties were defeated; *in only three of these counties has the hospital subsequently joined an investor-owned system.*

1. In May 1978, Lee County voters defeated a \$12.3 million hospital bond referendum for the

**Table 3.1: Public Hospital Bonds in North Carolina —
General Obligation and Local Government Revenue Bonds**

Election Date	Municipalities or Counties	Approved	Defeated
11-03-70	Pitt	\$ 9,975,000	
06-29-71	Davie	975,000	
11-20-71	Craven	6,500,000	
07-08-72	Mecklenburg	2,500,000	
07-08-72	Mecklenburg	2,500,000	
11-07-72	Haywood		\$ 4,500,000
06-16-73	Brunswick	2,500,000	
09-21-73	Bladen		2,500,000
10-06-73	Columbus	6,000,000	
11-06-73**	Martin	1,000,000	
05-07-74	New Hanover	9,360,000	
11-05-74	Pasquotank	3,900,000	
02-01-75	Stokes	2,500,000	
03-03-75*	Columbus	124,000	
03-22-75	Watauga	4,900,000	
07-08-75	Haywood	14,500,000	
03-23-76	Richmond	8,200,000	
04-27-76	Sampson		5,000,000
05-18-76	Mecklenburg	10,000,000	
06-22-76	Caldwell		2,500,000
08-23-77	Forsyth (Refunding)	13,000,000	
12-19-77*	Alamance	430,000	
05-30-78	Lee		12,300,000
11-07-78	Cumberland	5,300,000	
03-26-79*	Alamance	250,000	
09-19-79*	Henderson	285,000	
10-22-79*	Alamance	360,000	
11-06-79	Mecklenburg	15,000,000	
12-11-79	Union	13,000,000	
11-14-80	Franklin		5,800,000
04-06-81*	Henderson	70,000	
06-16-81	Johnston	7,500,000	
11-02-81*	Henderson	215,000	
11-02-82	Iredell		22,750,000
02-01-83	Pender	3,000,000	
04-26-83	Carteret	5,900,000	
	TOTAL	\$149,744,000	55,350,000

*2/3 Authorization: Election Not Required.

The North Carolina Constitution states in Article V, Section 4 that a local governmental unit cannot "contract debt secured by a pledge of its faith and credit" unless the debt is approved by a majority of voters in the jurisdiction. One important exception to this rule is that the county may issue bonds for any authorized purpose without voter approval for an amount up to two-thirds of the debt that was retired in the immediate previous year.

**Authorization extended for 3 years pursuant to action of the governing board.

county's only hospital. Two years later, American Medical International (AMI) leased the hospital and acquired operating control. In July 1981, AMI opened a replacement facility, Central Carolina Hospital, and assumed full ownership. The old hospital building was then closed.

2. In 1982, the voters in Iredell County rejected a bond referendum that would have provided funds to two hospitals in the county — Iredell Memorial Hospital in Statesville and Lowrance Hospital in Mooresville. The bond issue failed partly because of opposition from investor-owned Davis Hospital, the local newspaper, and physicians at Lowrance Hospital. Subsequent to the bond failure, the county commissioners approved a revenue bond that allowed Iredell Memorial to expand and update its facility. Lowrance Hospital entered into a management contract with Hospital Corporation of America in 1983.

3. Franklin County voters defeated a \$5.8 million referendum in November 1980; in July 1983 county officials signed a management contract for Franklin Memorial Hospital with Hospital Corporation of America (HCA). HCA offered to purchase Franklin County Memorial in 1984, but withdrew the offer in April 1985 because of difficulty in obtaining state permission to build a replacement facility that would suit HCA's needs. HCA is still managing Franklin Memorial Hospital. Meanwhile, the county commissioners are seeking another buyer.

In one county, hospital affiliation with an investor-owned hospital corporation followed voter approval of a bond referendum. In November 1978, Cumberland County voters approved a \$5.3 million bond referendum. In 1982, National Medical Enterprises (NME) negotiated an agreement to manage under contract both hospitals in the Cumber-

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THE CERTIFICATE OF NEED PROCESS IN NORTH CAROLINA

by Robin Woods

In 1974, concern about the unbridled proliferation of health care facilities and the accompanying unnecessary duplication of equipment and services prompted Congress to pass Title XV of the Public Health Service Act which required each state to pass a "certificate of need" (CON) law. The penalty for noncompliance was the loss of all federal public health money, which in North Carolina would have been almost \$60 million. In 1978, the North Carolina General Assembly responded with the enactment of what is now NCGS 131E-175 to 131E-191. As a result, a health facility must obtain approval from the state before pursuing any capital expenditure in excess of \$740,000 or purchasing equipment valued at more than \$400,000 and intended to aid in the provision of inpatient medical services.

Those seeking a certificate of need go through two levels of concurrent review — by the Certificate of Need Section in the State Division of Facility Services and by the local Health Systems Agency. Health systems agencies (HSAs) are nonprofit corporations set up to

provide local input into the health planning process.

The six HSAs in North Carolina operate in contiguous geographic areas. (See Map 3.1 on page 45.) The HSA develops and also applies its regional policies and system development goals in reviewing CON applications. The HSA routinely solicits comments on the projects at a local public hearing and frequently convenes such a hearing on its own initiative, particularly when reviewing a large project or competing proposals for the same service.

This public hearing function is doubly important since the state relies on the local HSA for this type of public input on a CON request. The other primary function of the HSA is in *planning* — assisting in the development of the annual *State Medical Facilities Plan*. This planning function is very important in providing local input since HSA recommendations on CONs are not binding.

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After a review, the HSA makes its recommendation to the CON Section of the Division of Facility Services of the North Carolina Department of Human Resources, which decides whether the CON shall be granted. The state conducts a full and independent review of the written CON application using the 21 review criteria set out in NCGS 131E-183 and the administrative rules promulgated under the statute (10 NCAC 3R).

The Division of Facility Services produces a yearly *State Medical Facilities Plan* which presents the state policies and indicates planning goals in the areas of health services and facilities. These policies are used by the state in reviewing CON applications for new or expanded health care facilities. The number of beds for any type of inpatient service to be allowed in a given geographical area of the state is set by the *State Medical Facilities Plan*, and the CON Section is required to evaluate CON applications in light of these requirements. There are procedures for an appeal of the state's decision by any affected party, including the disappointed proponent of the application.

Competition for a CON can be fierce. The 1985 *State Medical Facilities Plan* shows a total of 25,171 licensed beds in acute care general hospitals in 1983. The same report shows a projected statewide surplus of 2,353 beds by 1990.

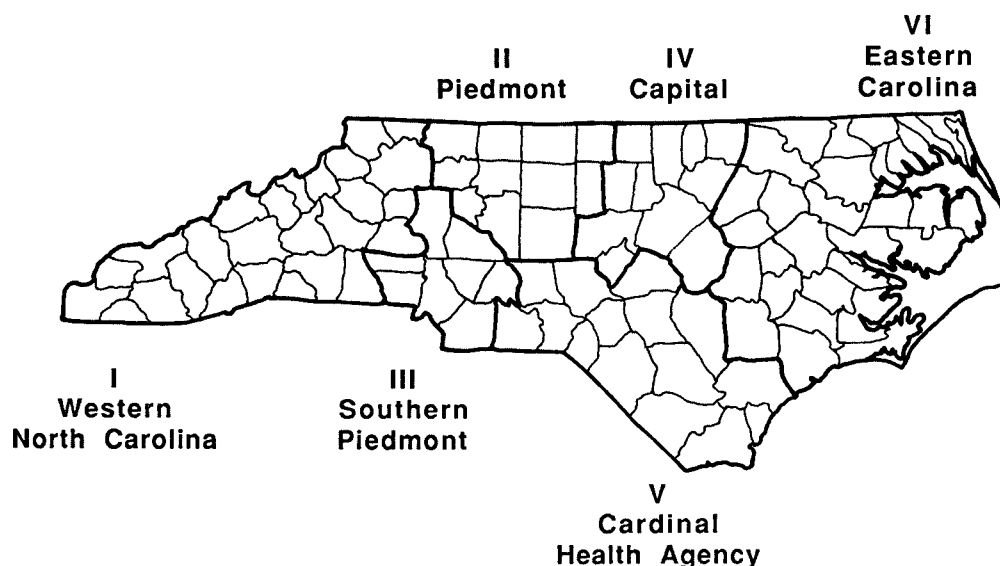
The CON process helps avoid capital expenditures that could ultimately cost the state

and consumers in higher health care charges. Ray Greenlaw of the Capital Health Systems Agency in Durham notes, "The dollar volume of these foregone expenditures has been substantial. For example, in North Carolina, from July 1981 through June 1983, \$416 million of the \$1.3 billion in capital projects proposed were withdrawn or denied."

Sandy Moulton, former Chief of the Certificate of Need Section, says that overall the CON requirement has benefitted hospitals. In addition to preventing the unnecessary duplication of services, she says, "Without the CON requirement, hospitals, with their high overhead, would have trouble competing in a free market with smaller organizations offering more specialized medical care at a lower price."

John Rich, former chairman of the Capital HSA Board of Directors, agrees with Moulton. He believes that the CON requirement benefits hospitals and that hospitals generally favor the CON system. Rich also thinks that the CON requirement has a greater effect on smaller hospitals simply because they cannot afford to hire the professional planning services used by larger hospitals. A result of this, he says, is that often, though not exclusively, "larger hospitals think and plan and then ask for something reasonable, whereas often smaller hospitals, in an effort to catch up, ask for too much and their requests fail."

Map 3.1: North Carolina Health Systems Agencies



land County Hospital System. Subsequently, HCA acquired Highsmith-Rainey Memorial from the county hospital system and now operates Highsmith-Rainey Memorial in a newly-built replacement facility.

One of the three public hospitals acquired by investor-owned corporations — Edgecombe General Hospital — had not presented a bond referendum to the voters. Four of the six public hospitals managed under contract by investor-owned companies also were located in counties that did not submit a referendum to the voters.

It must be noted that the absence of a referendum vote for a general obligation bond does not necessarily indicate that a hospital did not seek bond financing. For a hospital to obtain bond financing, it must obtain the N.C. Local Government Commission's project approval.⁶ The Commission examines the project's financial feasibility and must be assured of the hospital's ability to service the debt. A hospital currently unable to meet its financial obligations is unlikely to be able to make this assurance. The hospital must also obtain state Certificate of Need approval of the project.⁷ If the Local Government Commission approves the project and if the state grants a Certificate of Need, the appropriate local government officials must agree to bring the project before the voters. Local officials can terminate the process before a public vote if they feel that a bond referendum would be politically or economically inadvisable.

However, Deputy State Treasurer J.D. Foust says, "I know of no situation where the county commissioners refused to take a hospital bond issue to the voters. There have been some cases where the county commissioners called for the vote but did not endorse or work for approval. Some have even worked against the issue. Without strong support from the commissioners the chances of passage are

reduced." He goes on to say, "There have also been cases where hospital boards and administrators have forced the county to move ahead on a referendum too quickly prior to certificate of need (CON) or Local Government Commission approval. Most of those issues have failed at the polls. I do not know of any that were approved for CON and by the Local Government Commission that did not go to the voters."

Preliminary research has enabled the Center to tentatively reject both hypotheses stated above. Subsequent reports will examine the issues involved in more depth. Nevertheless, it appears that for each hospital faced with the decision of whether to remain independent, join a not-for-profit hospital system, or affiliate via sale or management contract with an investor-owned hospital system, a unique set of issues must be considered and carefully analyzed. Indeed hospital trustees and local officials should understand their own hospital's problems and should be fully aware of the implications of choosing any of the alternative organizational schemes. □

¹Montague Brown and Barbara P. McCool, *Management Options for Single Community Hospitals*, (Shawnee Mission, Kansas: Strategic Management Services, 1982), pp. 4-6.

²1983 Session Laws, Chapter 875, "An Act to Create the Legislative Commission on Medical Cost Containment."

³P.L. 97-248, Tax Equity and Fiscal Responsibility Act of 1982. 42 CFR 405, *Federal Register*, Vol. 49, No. 171, August 31, 1984.

⁴*Economic Trends*, Volume 1, No. 1 (Chicago: American Hospital Association, The Hospital Research and Educational Trust, Spring 1985), p. 8.

⁵*Ibid.*, p. 7.

⁶N.C.G.S. 159-51.

⁷N.C.G.S. 131E-178.

CHAPTER IV

COMPETITION: OTHER ACTORS ON THE HEALTH CARE STAGE

by Robert Conn

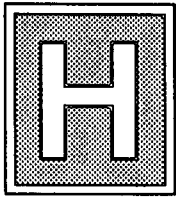
AN INTRODUCTION TO CHAPTER IV

The N. C. Center for Public Policy Research originally planned to limit its discussion in this report to an analysis of the investor-owned or -managed hospitals in North Carolina and of the investor-owned companies that are active in the state. As research and interviews progressed, the Center realized that this first report would be improved by expanding the discussion.

Hospitals are experiencing pressures from many different directions that may threaten their long-term existence. Potential conversion of ownership or management from public or private not-for-profit to investor-owned is one significant pressure. However, changes in (a) the setting of health care delivery (ambulatory surgery centers, urgent care centers, health maintenance organizations), (b) the systems of payment for health care services (diagnosis related groups), and (c) the way physicians treat patients are also pressures worthy of discussion in this report.

Competition among these actors on the health care stage can serve to weaken a hospital's economic stability and perhaps make it more likely to be a candidate for sale to, or management by, an investor-owned company. Also, many of these actors are, themselves, investor-owned. For example, American Medical International owns a nationwide chain of ambulatory surgery centers (AMI Same Day Surgery Center) and Humana owns a chain of urgent care centers (MedFirst).

There are several investor-owned health maintenance organizations active in North Carolina (HealthAmerica, Carolina Permanente Medical Group, and PruCare of Charlotte). However, this chapter focuses on describing health care actors other than hospitals, not on the type of ownership.



The traditional hospital is like a bleeding porpoise surrounded by hungry sharks.

The sharks are freestanding ambulatory surgery centers, urgent care centers, diagnostic centers, changes in reimbursement and physician practice, and the plethora of other new competitors to the traditional general hospital.

Experts who have studied the situation in North Carolina hospitals fear that the very existence of many hospitals will be threatened as these competitors turn one hospital profit center after another into a money loser.

"If you pull out the parts of the hospital that are profitable," said John Young, a staff researcher with the N.C. General Assembly, "The hospital will be unable to stay afloat...the hospital system as we know it will fly apart."

Glenn Wilson, Professor and Chairman of the Department of Social and Administrative Medicine at UNC-CH Medical School conducted a 10-month study of bed occupancy rates in N.C. acute-care general hospitals. The study, covering the period 1978 to 1982, found that smaller hospitals are losing patients because of advances in technology found at larger medical centers and a public perception that larger hospitals offer better medical care.

Changes in federal Medicare payments to hospitals may cause hospitals to lose even more patient revenue. Barbara Kramer, former chief of the State Health Planning Section, Department of Human Resources, said that her office, after making a series of assumptions, reached an early estimate that 33-34 hospitals would be big losers under the new Medicare prospective payment program, about 70 would be big gainers, and the rest would come out about even. She said that when 1985 figures were applied, the hospitals were in worse shape than expected, with the gainers gaining less and the losers losing more.

"It's very difficult for a hospital to work in that environment," said Wilson. "I still think a whole lot of them will close."

Douglas Henderson-James, an Associate in the Department of Health Administration of Duke University, said the hospital may be left with "only a certain set of things to do," and those things may be technically difficult and best done in medical centers. "That seems to me to threaten the existence of the general hospital in the rural area."

"Hospitals can't survive based on patients who come in and go to bed," said Elbert Legg, assistant administrator of Moore Memorial Hospital in Pinehurst. "We have to pick up a few dollars (elsewhere) to survive."

Virtually everyone agrees the total health care market is limited. Unless a community is growing

rapidly, there's only so much surgery that needs to be done, only so many deep cuts and broken legs, and only so many babies. The growth of vaccines is steadily reducing the risk of infectious disease.

The general consensus is that the hospitals that survive will be those which evolve into health care centers, performing a variety of services rather than concentrating solely on treating patients in bed.

"Hospitals are going to have to change their roles in the community," said Pete Royce of the N.C. Hospital Association.

"Alternate delivery systems don't have to be detrimental to hospitals," said Pat Poston, Vice President for Planning for SunHealth, which manages or owns dozens of hospitals. "If they are responsive to market demands, they can compete."

The competition comes at a time when hospitals — particularly those in smaller cities — are being buffeted by other forces:

- New Preadmission Review (PAR) Programs sponsored by a range of organizations from Blue Cross and Blue Shield of North Carolina to the Mecklenburg County Health Care Cost Management Council are succeeding beyond expectations, cutting hospital admissions and reducing hospital stays.

- Emphasis on outpatient surgery is increasing across the Carolinas, which means growing numbers of patients are recuperating at home. That, too, means empty hospital beds.

- Medicare's prospective payment program, which pays a flat fee for each diagnosis, has led to shorter hospital stays for an increasing percentage of the elderly.

- New Health Maintenance Organizations (HMOs) are expanding rapidly in North Carolina. All place emphasis on preventive care and on keeping patients out of the hospital. Many add a financial incentive for doctors who do so. In Charlotte, five HMOs currently are signing up doctors and employees.

- Business, government, insurance companies and health organizations are forming cost-cutting coalitions, adding pressure to save health care dollars.

- Major surgery is being centralized in larger hospitals in the major cities at the expense of hospitals in outlying communities.

- Insurance policies are changing so they no longer reward longer hospital stays over outpatient services.

"It is evident that hospital care in North Carolina is moving to the larger hospitals and that this trend has been consistent over the past decade," said Wilson, of the UNC-CH School of Medicine. "The reasons for this movement are not fully understood, but undoubtedly, in large measure, are related to new technologies which tend to be concentrated in the larger hospitals." Indeed, the

larger hospitals collectively are getting a steadily greater share of patients being hospitalized in the state, Wilson's figures show. Dr. Harry Nurkin, president of the Charlotte-Mecklenburg Hospital Authority, also sees "the gravitation of surgery to the big cities. It is easier to go up the Interstate to the big hospital."

That trend merely accelerated the deterioration of the smaller hospitals. Nationally, according to

figures compiled by the American Hospital Association, overall hospital admissions declined by 3.7% from 1983 to 1984 — from 37.7 million admissions to 36.3 million. Length of stay fell 4.3%, from 7 days to 6.7 days.¹

If you break down those figures by hospital size, hospitals with more than 500 beds — mostly medical center teaching hospitals — actually gained
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NORTH CAROLINA HOSPITALS SUCCUMB TO ILLS OF HEALTH CARE INDUSTRY

by Jack Betts

While many of the state's general acute-care hospitals are converting to ownership or management by investor-owned hospital management companies, other North Carolina hospitals are succumbing to the ills of financial atrophy. In 1985 alone, three general hospitals in rural areas of the state expired, two community hospitals in the Piedmont merged in an effort to avoid a hemorrhage of red ink, and another amputated much of its staff in hopes of remaining alive while competing with larger, stronger health care facilities.

These North Carolina symptoms are part and parcel of a series of national indicators of hospital distress. The bimonthly magazine *Hospitals* notes that between 1980 and 1984, a total of 270 community and non-community hospitals — with a total of 14,361 beds — closed. And the magazine noted, "Some predict that as many as 1,000 hospitals will close by the end of this decade; others argue that hospitals will be able to adapt to these changes and will not have to close."¹

That's theory, but in the North Carolina counties of Bertie and Warren, and in the Mecklenburg County town of Huntersville, hospital closures are very real.

The first hospital to succumb in 1985 was Warren General Hospital in Warrenton, the victim of a \$170,000 deficit in its annual operating budget of \$1.8 million. The 37-bed public hospital ceased admitting new patients in January, halted operations as a full-service hospital in February, and laid off about 50 employees, according to Warren County Manager Charles Worth. The 34-year-old facility, however, continued offering health care on an intermediate-care basis in February 1985 and was still doing so in 1986.

Healthco, the Soul City area health center developed during the 1970s, operated an intermediate care facility there while county officials searched for a way to reopen Warren General as a general hospital or perhaps as a satellite unit of two other nearby hospitals — Community Hos-

pital in South Hills, Va., about 20 miles away, or Maria Parham Hospital in Henderson, about 15 miles away in Vance County.

Warren General's ills were directly related to a declining patient population. Like many other rural hospitals, Warren General was hit hard by the Reagan administration's changes in reimbursement policies for Medicare patients. In its last few months of operation, Warren General was running a \$30,000 per month deficit, one that the Warren County Commissioners could not continue to cover — especially because hospital care was available at nearby locations and at Duke Medical Center in Durham, a short drive down I-85 from Warrenton.

Even higher deficits at Bertie County Memorial Hospital in Windsor in northeastern North Carolina forced that 33-year-old facility to close in July. Bertie Memorial, a county-owned hospital operated by the non-profit SunHealth Inc. management firm of Charlotte, was experiencing a \$55,000 monthly deficit before the county's board of commissioners decided in May to close the 49-bed hospital.

Bertie Memorial's ills, like those of Warren General, were a result of a reduction in the number of patients due to changes in medical treatment, including more outpatient services, according to hospital administrator George Brandt. Months before the hospital closed, many Bertie County patients were already patronizing hospitals nearby in Williamston, Ahoskie and Edenton, where full-service, acute-care hospitals operate. Closing the hospital at Windsor involved laying off about 90 workers, Brandt said. In late 1985, Bertie Memorial Hospital reopened, managed by the investor-owned Forum Health Investors, Inc. of Dallas, Texas. Shortly thereafter Bertie County contracted with Westworld Community Healthcare Centers of Lake Forest, California to lease the hospital.

The state's third hospital closure of the year involved far less disruption. When the new

Jack Betts is associate editor of North Carolina Insight.

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patients nationally, from 7.87 million to 7.89 million, a 0.2% increase.

But in just one year, admissions to hospitals having between 50 and 99 beds fell by a whopping 9.2%, from 3.79 to 3.44 million, and hospitals in the 100-199 bed range fell from 7.85 million to 7.35 million, a drop of 6.3%.

All these forces have meant financial difficulties for some hospitals. The added competition from independent competitors has simply made the problem worse, perhaps accelerating changes.

Changing Mission of Small Hospitals. "By the year 2000, very little acute care will have to be done in hospitals with 75 or less beds," said Duke's Henderson-James. Instead, he predicts hospitals will become high-tech diagnostic centers emphasizing walk-in and out-of-hospital services. The most sophisticated equipment — such as CAT scanners — will be available, and the goal would be to catch disease early, when it can be treated more easily.

Henderson-James said these health care centers would have 18-24 beds, primarily for observation, not treatment. "They won't have to be acute care," he said. "And the building won't have to meet the standards of a hospital."

Critically ill patients would be stabilized, then sent on to medical centers. He said the health care center would be "a very different resource, but it does for the community what the hospital has historically done."

In addition, he sees an evolution of facilities that would function as more than nursing homes, but provide less than the acute care of hospitals. "This would be for days 3-4-5-6 after a hip fracture."

He declared, "This is a time when the payment mechanisms are in tremendous flux. We can really be experimenting with different approaches. Which ones work and provide quality care?"

"Hospitals are faced with sustaining themselves with much lower censuses," said the Hospital Association's Royce. "They've either got to cut costs significantly or do other things."

SunHealth's Poston pointed out that hospitals without debts from construction programs would have little diffi-

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130-bed University Memorial Hospital opened in the spring, Huntersville Hospital ceased operating as a hospital and its facilities were converted to a nursing home. The closing of Huntersville was far less directly related to changes in Medicare reimbursement policies. Huntersville closed as part of an arrangement with the Charlotte-Mecklenburg Hospital Authority which closed another hospital — Charlotte Community — in 1984. This was done so that the new University Memorial Hospital could be opened without increasing the number of beds available in Mecklenburg County.

Public hospitals have not been the only facilities to close. The for-profit Gordon Crowell Memorial Hospital in Lincolnton, owned and operated by American Medical International (AMI), shut down its 93-bed operation in 1984. Its facilities were sold to a nursing home operator. Gordon Crowell's troubles were also financial, though not directly related to changes in Medicare reimbursement. As a private hospital in a small county where a public hospital also operated, Crowell Memorial simply could not attract enough patronage to support itself, and AMI shut the facility after years of financial losses.

In Alamance County, two hospitals that have experienced financial pinched nerves in recent years have recently completed a merger under a not-for-profit corporate charter that hospital officials hope will ensure vitality in the future. Alamance County Hospital and Memorial Hospital of Alamance, both located in Burlington, suffered from the changes in Medicare reimbursement and from a patient drain due to the lure of big-city hospitals in nearby Greensboro, Chapel Hill and Durham. Within a 30-mile radius, 11 other hospitals are in operation.

The two Alamance hospitals agreed to become subsidiaries of the new Alamance Health Services, Inc., which would continue to operate the 163-bed Alamance County Hospital and the 139-bed Memorial Hospital of Alamance. The latter also operates an 83-bed skilled nursing home. The administration and the medical staffs of the two hospitals were merged in order to reduce costly duplication, enable the two facilities to cope with reductions in patient populations, and to compete with the major hospitals in adjoining counties. They will be administered under a contract with SunHealth.

Officials of the new corporation said the two facilities would retain their separate names for at least a year and make no substantive changes in appearance or services while management studies whether, for instance, each facility should specialize in certain treatments or services in the future.

Neither of the two Alamance hospitals was in serious financial distress. Each had suffered a decline in in-

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come from inpatient services of about 20 percent, hardly a fatal blow to their systems. But the merger was undertaken at least partly to ensure that neither was infected with the germs of fiscal illness. "We're not going to save millions of dollars," said Marvin Yount, president and chief executive officer of Alamance Health Services, "but if you save \$50,000 here and there, in these times it adds up."

Other hospitals that have felt the drain of inpatients due to sharp changes within the health care industry have taken other steps to remain healthy. In Charlotte, for example, 79-year-old Mercy Hospital is cutting its staff and restructuring its care curriculum to, as a headline in *The Charlotte Observer* noted in February, 1985, take a "Cure For Ailing Demand."²

Mercy, owned by the Catholic order Sisters of Mercy, has been a mainstay of health care in the state's largest city most of this century. But in 1983, when empty beds began to make a dent in the hospital's operating budget, Mercy began laying off employees — first nursing aides and later other employees. Yet Mercy is so confident that it can remain operational in the current health care climate that it is proceeding with plans to build an 85-bed satellite hospital in Pineville in the southern part of Mecklenburg County to serve the rapidly growing population there.

And finally, one hospital was searching for ways to keep operating. Franklin Memorial Hospital in Louisville, a 90-bed facility, has been on the state's informal "endangered hospitals list" for some time. Its occupancy rate dropped to about one-third this year, and Franklin County Commissioners had begun negotiations with Hospital Corporation of America (HCA) to sell Franklin Memorial. But negotiations broke down in April, 1985 because state law prohibited the transfer of a Certificate of Need (CON) to build 14 new beds and renovate existing facilities. HCA would not purchase the hospital without the certificate, so local legislators steered an amendment through the 1985 General Assembly to allow CON transfers under certain conditions.

Late in 1985, the Franklin County Commissioners and the Department of Human Resources negotiated an extension on the Certificate of Need. The department agreed to extend the CON for the 14 new beds beyond January 1, 1986. However, the department did agree to extend the CON for the 14 beds *if* the hospital were to be sold. In mid-April, Franklin Memorial was still searching for a buyer.

¹"Hospital closures remain stable," by Ross M. Mullner, David L. McNeill, and Merwyn A. Landay, *Hospitals*, by American Hospital Publishing, Inc., Chicago, Vol. 59, No. 14, July 16, 1985, p. 91.

²"Hospital Rises To Challenges In Cutback Era: Like Other Facilities, Mercy Taking Cure For Ailing Demand," by Robert Conn and Bruce Henderson, *The Charlotte Observer*, Feb. 20, 1985, p. 1B.

culty closing down unused beds, laying off excess workers, and using the savings to operate effectively. But hospitals paying off construction debts, either through loans or bonds, would have to continue paying the debt anyway, so they would not realize the same quick benefits of closing down beds. However, those hospitals could change the use of the beds "for such things as mental health, chemical dependency or rehabilitation," she said.

Paul Betzold, senior vice president of operations at Charlotte's Presbyterian Hospital, said hospitals have to reorganize to make their services more convenient and at the same time, "be price competitive if at all possible."

Under these changing circumstances, expert after expert questioned what would happen to the poor or to the medically indigent — people who make too much money to qualify for government programs that would pay for their health care bills, but who don't have the insurance coverage to handle a major hospital bill.

"He's getting along fine until he gets a \$10,000 medical bill," said Royce. "Now he's medically indigent and can't cope with that." That situation may grow worse, he said, "as more people decide they can't afford to have health insurance."

"Since the late 1920's, the hospital has been viewed as a community resource," said Henderson-James. "When you needed it, it was there to take care of you." Now the emphasis, increasingly, is on hospitals that are lean and efficient. That may mean turning away people who can't pay. "The hospital is much less of a compassionate service," said Henderson-James. "If you can afford it, you can have it. Otherwise, tough luck...The poor will be shut out."

And there's concern no one is adding up total costs. "What's the cost impact on the system?" asked Young. That answer is vital to state government "since government is such a payer of medical costs."

Competition from New Types of Health Care Facilities

Impact of Urgent Care Centers. Traditionally, patients with urgent health care needs went to the local hospital emergency room or to their physician's office. Now many patients are receiving health care at

an office that doesn't require appointments, offers evening and week-end hours, and a wide variety of services with little time spent sitting in the waiting room. These health care centers go by a variety of names — urgent care centers, minor emergency centers, or "Doc in a Box."

Diagnostic Centers. The only diagnostic centers currently on the drawing board in North Carolina are hospital-related, like the one in a Medical Mall planned by Forsyth Memorial Hospital in Winston-Salem — essentially an on-campus medical shopping center. Elsewhere, in states like Florida, private enterprise is running these centers in competition with hospitals.

Ambulatory Surgery Centers. Ambulatory surgery centers come closest to cutting the hospital's jugular vein, especially those owned by doctors who used to do all their operations at the hospital. "It's a matter of redistribution of profit," said Ed Haney of the State Health Planning Office. "It's going to doctors instead of the hospital. It's just another thing taken out of the hospital." Section 1 of this chapter examines ambulatory surgery centers.

How Hospitals Fight Back. Hospitals are fighting back with a variety of programs, many of which will take hospital people far from the hospital campus.

At Moore Memorial, Legg said there's a venture committee looking for more ways to make money. The hospital currently has a primary health care program in which a team goes to industries and businesses to perform screening exams. The hospital is also exploring a joint venture to establish an outpatient diagnostic center on the hospital campus, an urgent care center, a cardiac rehabilitation program, and expansion of a new wellness program now primarily aimed at employees, volunteers and medical staff.

"One of the concerns a hospital has is that if that service is provided by someone else," said John Holly, executive director of Frye Regional Medical Center in Hickory, "the hospital will lose money."

"That loss of revenue may adversely affect everybody," he said, since many of the hospital's expenses would remain the same. "We're all adversely affected by things that go out the door."

So Frye — a hospital owned by American Medical International, an investor-owned corporation — is chasing new services. Among them, Holly said, are an inpatient rehabilitation unit — rare in an acute hospital, an outpatient cardiac rehabilitation program on an area college campus, an industrial health and wellness program that includes placing hospital-employed nurses on plant sites, home health care for both Medicare and private patients, medical equipment sales for home use, and total nutrition programs (TNP) for patients at home. Frye soon will

begin a short-stay obstetrical program aimed at sending women home 12 hours after delivery, if they desire.

Here's what some other hospitals are doing, in addition to ambulatory surgery:

- Charlotte's Presbyterian Hospital has purchased a for-profit home health agency and turned it into a not-for-profit Presbyterian HomeCare — "our way of delivering Presbyterian Hospital's skill and care to patients in their own homes." The program — on call seven days a week around the clock — includes nursing care, physical therapy, speech therapy, occupational therapy, medical social services and home health care, and also arranges delivery of home care equipment, such as beds, wheelchairs, walkers, and special devices.

- The Medical Mall at Forsyth Memorial will be an on-campus drive-up shopping center, featuring a medical supply and pharmaceutical distributor open to the public, a diagnostic facility (primarily for quick tests), physicians' offices, and an ambulatory surgery unit.

- Good Hope Hospital in Erwin is getting into a lot of new businesses, such as establishing an immediate service laboratory in Fayetteville to serve doctors there; a second facility in Benson that offers lab tests, electrocardiograms, electroencephalograms, X-rays and physical therapy; and an urgent care center adjacent to the emergency room. The 75-bed hospital is selling beds, wheelchairs and other equipment for the patients at home and running a mobile CT scanner serving three hospitals and a mobile nuclear medicine/ultrasound unit serving five hospitals. Administrator Phil LaKernick predicts 20% to 25% of his hospital's revenue will come from outside sources.

- Nash Day Hospital, a new facility being developed adjacent to Nash General Hospital in Rocky Mount, will include an outpatient diagnostic facility (including laboratory and X-ray) and outpatient physical therapy in addition to ambulatory surgery, said Administrator Brad Weisner. The hospital also provides home health care and wellness programs.

- Memorial Mission Hospital in Asheville is considering a freestanding diagnostic center, according to Russ Danielson, vice president for Corporate Services. It's also involved in a sports medicine program "for athletes and weekend warriors" with physical assessment and exercise testing, and a three-phase cardiac rehabilitation program — including monitored exercise at the YMCA. Both of these are carried out partly under the auspices of a for-profit subsidiary.

- Hospitals and urgent care centers that are a part of National Medical Enterprises' nationwide chain now accept the American Express card for payment of a patient's bill. Many hospitals now accept VISA or Mastercard.

What Happens to the Losers? Even so, Dr. Harry Nurkin, president of the Charlotte-Mecklenburg Hospital Authority says, "We may see some hospitals go out of business — hospitals that are not able to make the transition."

There is considerable debate whether that should be permitted. Few defend saving the second or third hospital in a town with declining hospital business. The debate is whether the last-remaining hospital should close.

"We have to rethink whether every individual community has to have a hospital," said Dr. Sandra Greene, Senior Director of Health Economics Research for Blue Cross and Blue Shield of North Carolina. Agreeing with other experts, she said emergency medicine had evolved to the point where hospitals aren't needed everywhere. Instead, an emergency medical center would stabilize a patient before transporting that person to a hospital in another community. "I can't see the state bailing out hospitals," she said, though she conceded that some areas — especially the mountains — "might be different."

As a matter of policy, the state has decided against bailing out troubled hospitals. Instead, a newly-established Community Hospital Technical Assistance Program headed by Jim Bernstein (in the Office of Rural Health Services in the Department of Human Resources) will provide assistance and advice to county-owned or private non-profit hospitals in financial difficulty.

"While the state can't bail out financially troubled hospitals, this program gives us the opportunity to use our technical know-how to advise hospitals and communities about how best to deal with their problems," said Gov. James G. Martin on March 21, 1985.

Many of the hospitals that were money losers under Medicare on Kramer's list are on the list of hospitals in trouble.

Bernstein said that perhaps five or six were in real trouble, but declined to name which ones because "by saying, it could contribute to their demise." All have less than 200 beds. He said it was too late for the traditional approach in these instances of closing beds and cutting staff members.

Bernstein said his program would gather a corps of technical experts to aid a community to establish a stable medical care delivery system. The team will help a community look at alternate ways of providing care. "There are lots of duplicated services even in poor counties," he said. So by pooling resources of health department, hospital, and rural health centers, he hopes to develop new ways to provide continued care, tailored to each community. "The hospital as an acute care institution might not be what people need."

Or the hospital might become a satellite of a hospital in an adjoining county. "We want to get all the options on the table," Bernstein said. "We have to be really open-minded."

Dr. Deborah Freund, an economist at the UNC-CH School of Public Health, said hospitals could close beds, fire people, jack up some prices, even go into other lines of business outside of health care. "No doubt that will be difficult. But it is not necessarily true that hospitals would go under."

Further, she said she doesn't feel sorry for the hospitals that do fail. "They could have started an ambulatory surgical facility. They could have started other programs. Do I think they should be bailed out? As an economist, I would probably say 'no' to that," said Freund.

But SunHealth's Pat Poston pointed to another problem: the population as a whole is rapidly getting older, and old people need more hospitalization. "Some day, those beds will be needed. We need to put the beds in the bank, and have enough hospital utilization to sustain essential services."

Others, even those ordinarily expected to oppose government intervention, see a need for government rescue for hospitals in geographically remote areas.

"In some rural areas of the country, the general public will be truly disserved if the (hospital) facility is allowed to close," said Dr. James Sammons, the American Medical Association's executive vice president, in a recent interview. "That is not in the public interest." The answer, he said, might be local tax subsidy — or if that fails, subsidies by the state or federal governments.

Wilson is worried that so many functions will leave the hospitals that what is left will be very expensive. "Some of us will still need hospitalization," he said, "and when you do need it, it's going to be very expensive."

Wilson said it may be possible to lower the price of health care through price competition, but "I'm not yet persuaded." He added, "We've got the best hospital system in the world. Let's make sure we don't unnecessarily damage it."

The following sections of this chapter examine, in greater detail, three of the rapidly growing segments of the health care industry that are competing with the traditional general hospital in North Carolina. Section 4 discusses a different, but related phenomenon, physician practice changes and diagnosis-related groups. □

¹Meantime, overall expenses continued to rise, but at a much slower pace, from \$120.2 billion in 1983 to \$125.7 billion in 1984, a 4.5 percent increase. For those under 65, admissions declined from 25.9 million to 24.8 million, about 4.2 percent.

CHAPTER IV

Section I

FOCUS ON AMBULATORY SURGERY CENTERS

by Robert Conn

One "shark" surrounding the "bleeding porpoise" described in the introduction to this chapter is the freestanding ambulatory surgery center, which competes not only with the hospital's inpatient operating rooms, but with outpatient surgery as well.

Outpatient, same day, Single Day, ambulatory surgery. Whatever you call it, it is growing more popular. Technological advances and the desire to save money and time are the main forces fueling this trend. Resisting it are physician habits and reservations about quality of service.

This type of surgery can be performed in many settings. About a decade ago, some leading hospitals began to emphasize outpatient surgery done in hospitals, with many of the attributes of hospital care, but without an overnight stay. More and more often today, outpatient surgery is being performed in a surgical center totally apart from a hospital — or freestanding.

In Fayetteville, a freestanding ambulatory surgery center developed because the hospitals were not moving fast enough to

establish outpatient surgery, said Dr. John T. Henley Jr., a Fayetteville ear, nose and throat specialist.

In Charlotte, aggressive introduction of hospital outpatient surgery departments a decade ago forestalled independently-owned surgery centers until just recently.

In Mooresville, Dr. Lewis Brinton pioneered the state's first ambulatory surgery center in 1976, then watched it stand nearly idle for more than four

Getting Steve Lewis home hours after surgery: That's AMI caring. Steve Lewis had been putting off surgery for years. There just wasn't time. And the thought of spending three days in a hospital bed was a little unnerving.

But then Steve heard about Single Day Surgery.

Single Day Surgery is the new concept that lets you have your surgery in the morning and be home the same afternoon. Your operation is performed in a specially designed surgery center — a modern medical facility with a comfortable, relaxing atmosphere. And there's no overnight stay; you recover in the comfort of your own home....

Today, nearly forty percent of all surgery can be performed as Single Day Surgery. Everything from routine tonsillectomies to delicate laser eye surgery. At a cost savings of up to thirty-five percent over conventional surgery....

Single Day Surgery is a service of AMI, American Medical International. We operate hospitals and health care facilities serving 500 communities on five continents. We offer Single Day Surgery in our freestanding surgery centers, as well as in our hospitals...

—Advertisement in Hospitals, Vol. 58, No. 18, Sept. 16, 1984, page 69.

years because medical insurance companies weren't yet set up to pay for surgery except in regular hospitals. It even took Brinton three years to win a state license — Ambulatory Surgery Center License No. 1 — and that required a special act of the General Assembly.

Now, in parts of North Carolina, the free-standing centers are breaking out like measles. Three, four, five or even six centers have been approved or requested in a single county. But vast areas of North Carolina — primarily in the mountains and coastal plain — have been virtually left out.

Changes in federal law, establishment of preadmission review programs, and revised insurance company practices virtually force doctors to switch from admitting some surgery patients to sending them home to recuperate.

For instance, under the Mecklenburg County Health Care Cost Management Council's¹ Experimental Preadmission Review Program (PAR), scraping the uterus — which doctors call dilation and curettage, or D&C for short — is approved only for outpatient surgery unless it is "complicated by other medical illness requiring hospital care."

Employees of companies that sign up are told to have PAR approval in advance. In the absence of complications, some participating organizations simply tell the employees their insurance won't cover hospitalization for a D&C; others use the PAR

program opinion as advisory.²

For instance, a D&C can be done in either a hospital outpatient surgery department or in a free-standing center. Both are cheaper than inpatient surgery, where the charge for a room may make it more expensive. But freestanding centers — even those run by hospitals — may be cheaper than hospital outpatient surgery centers because of requirements that all departments within the hospital share overhead and bad debts.

Table 4.1 shows the results of a Blue Cross/Blue Shield charge study done in 1982.

"Cost-wise, it's foolish to put a patient in the hospital when the surgery could be done in an outpatient surgery center," said Brinton.

"The idea of freestanding ambulatory surgery is not new, just new to North Carolina," said Dr. Deborah Freund of the UNC-CH School of Public Health. "We are lagging behind 10 years. People have had experience in other places."

What is Ambulatory Surgery? "Ambulatory surgery is any surgery you walk away from, from removal of a pimple to hernia repair," said Ed Haney of the State Health Planning Office in the Division of Facility Services.

Ambulatory or outpatient surgery evolved because of developing technology. Suddenly, the need for general anesthesia no longer meant a patient had to be admitted. Rather, many could wake up and

Table 4.1: Average Inpatient and Outpatient Institutional Total Charges for Seven Surgical Procedures

Procedure	Inpatient	Outpatient	Difference
Myringotomy, Tonsillectomy, Adenoidectomy ^a	\$ 877	\$ 390	\$ 487
Dilation and Curettage ^b	930	467	463
Laparoscopy w/ Tubal Ligation ^c	1,010	537	473
Inguinal Herniorrhaphy ^d	1,442	613	829
Excision of Breast Mass	1,103	442	661
Vasectomy	949	237	712
Circumcision	991	466	525

Weighted Average Savings — \$552

^a Myringotomy: insertion of tubes in ear. Tonsillectomy and adenoidectomy: removal of tonsils and adenoids.

^b Dilation and Curettage: scraping of the uterus.

^c Laparoscopy with tubal ligation: insertion of endoscopic device into the abdomen and tying off the tubes that run from the ovaries to the uterus.

^d Inguinal herniorrhaphy: repair of abdominal hernia.

Source: Blue Cross and Blue Shield of North Carolina, 1982

walk out the door.

"The technology has changed so much in the past three years," said Russ Danielson, vice president for corporate services for Memorial Mission Hospital in Asheville. "It's spurred a lot of outpatient surgery." The advent of laser surgery has turned many one-time inpatient operations into outpatient ones, he said. Cataract removal, which used to require a week-long hospital stay, now can be done in same-day surgery. Knee surgery often is done with an arthroscope rather than as a major, cutting operation.

The increase in the use of ambulatory surgery has actually involved a combination of changes in surgical and anesthesia techniques and new technology, said Dr. Donald Linder, owner of the Surgical Center of Greensboro.

These advances in development and use of drugs, in use of laser and microscopic surgery, in control of bleeding during surgery, and in the control of post-surgical infections, have made lengthy stays in hospitals after surgery less frequent than in the past. Even the relatively conservative American Medical Association House of Delegates endorsed some procedures for ambulatory surgery as early as 1971.³

And Fayetteville's Henley said virtually anything done under a local anesthetic should be done in a doctor's office or an ambulatory surgical facility.

The exact setting doesn't really matter because hospital outpatient surgery departments and freestanding surgery centers are similar. "From the consumer's point of view, they mean the same thing," said Haney.

One key difference is the way they are regulated. Hospital outpatient surgery departments are included under the hospital's license, while freestanding ambulatory surgery centers are licensed separately — even those operated by hospitals. What makes the setting of ambulatory surgery more impor-

tant today is whether an employee's health insurer or some other third-party payer will pay for the procedure. Until very recently, surgical procedures performed outside a hospital were not eligible for this reimbursement. Even now, the statutory definition of an ambulatory surgical facility used in the North Carolina General Statutes states that while an ambulatory surgical facility may be operated as a part of a physician or dentist's office (if it is so licensed by the Division of Facility Services), "... limited ambulatory surgical procedures which do not constitute an ambulatory surgical program as defined [in the statute] and which are performed in a physician or dentist's office does not make that office an ambulatory surgical facility."⁴ As Haney said when defining ambulatory surgery, "[it] does not include surgical procedures done in a doctor's office." In other words, office procedures remain distinct from ambulatory surgery procedures.

Explosive Growth. The growth of ambulatory surgical facilities has been explosive, and controversial. At the start of 1984, there were only 18 — all freestanding facilities. By the end of 1984, another 11 had opened, some operated by hospitals, but most by groups of doctors or by national chains. Table 4.2 shows the number of hospital-based and freestanding ambulatory surgical programs in North Carolina. The *1985 State Medical Facilities Plan*⁵ included this separate section on ambulatory surgical programs for the first time this year.

Some independent centers, like the Fayetteville Ambulatory Surgery Center and the Surgical Center of Greensboro, involve dozens of doctors, while others are really extensions of individual or small group surgical practices — like the Brinton Surgical Center in Mooresville or Carolina Eye Associates in Southern Pines.

Table 4.2: Hospital-Based and Freestanding Ambulatory Surgery Programs in North Carolina, August, 1984

HSA	Hospital Based Programs	Freestanding Programs	Hospitals with No Ambulatory Surgery Programs
I	16	3	17
II	13	9	7
III	14	7	2
IV	12	3	8
V	11	2	8
VI	10	5	12
TOTAL	76 (72%)	29 (28%)	54

Source: 1984 Survey conducted by State Health Planning Section, *1985 State Medical Facilities Plan*, Department of Human Resources, Division of Facility Services, p. A-10.

By and large, the freestanding facilities are similar. For instance, each of three independent general surgery facilities to be built in Charlotte will cost about \$2 million, will have 10,225 to 12,800 square feet and four operating rooms, and projects anywhere from 4,128 to 5,600 surgery cases a year by 1986.

The explosive growth of outpatient surgery has brought warnings to hospitals from the N.C. Hospital Association. Said the Association's Pete Roye, "We have said (to hospitals), 'You are not going to maintain your current level of service if you depend on inpatient services.'"

And the hospitals are fighting back, many with new facilities in addition to existing departments. For instance:

- Presbyterian Hospital in Charlotte is adding a separate ambulatory surgery center across Fourth Street from its large outpatient surgery department — which will remain in operation. That department was established in 1974 — long before Blue Cross and Blue Shield of North Carolina began a 1979 statewide campaign to persuade surgeons to do more outpatient surgery. Presbyterian's \$2 million freestanding facility will be quite similar to the three independent general surgery facilities: 12,000 square feet, four operating rooms, a projected 4,400 cases by 1986. One key difference: Presbyterian projects its average charge at \$213, while the average price at the others will range in 1985 from \$330 to \$358.⁶

- Forsyth Memorial Hospital in Winston-Salem is developing a Medical Mall — a virtual on-campus shopping center that will include an ambulatory surgery center and a number of other facilities. Forsyth Memorial also will maintain its separate outpatient surgery department.

- Nash General Hospital in Rocky Mount will soon open Nash Day Hospital, which will include an ambulatory surgery center and other walk-in programs. The facility will feature small private rooms where patients will stay before surgery and for a couple of hours afterward.

- Asheville's Memorial Mission Hospital is erecting a freestanding ambulatory surgery facility, under a subsidiary, to replace an outpatient surgery department in the hospital. Danielson said, "We're offering the ambience of a doctor's office setting with full hospital support."

- At Moore Memorial Hospital in Pinehurst, a freestanding ambulatory surgery center with four operating rooms opened in 1984 in a 16,000-square-foot building. The center is a separate corporation from the hospital, said Elbert Legg, assistant administrator of the hospital. Outpatient surgery is continuing in the hospital, but only for patients who might have to be admitted after surgery or for those whose operations require special equipment.

"The goal is to reduce the cost of surgery 30-40% for patients," Legg said. Eventually, about 5,000 operations are projected for the ambulatory surgery center, and 6-7,000 for the hospital. "It will take a couple of years to get to that point," he said.

At a minimum, many hospitals have added distinct outpatient surgery departments with separate parking lots, entrances and waiting areas. Indeed, said Eugene W. Cochrane Jr. of the Duke Endowment, a major benefactor of hospitals in North Carolina,⁷ "Most of the grants we have made for ambulatory surgery have been to renovate another (separate) entrance and a lobby area."

Frye Regional Medical Center in Hickory is one, doing about 38% of all operations (3,000 of 7,800) in an outpatient surgery unit that has a separate recovery and waiting area, but uses the hospital's main operating rooms.

The Hospital Association's Pete Roye says, however, that some hospitals still don't have outpatient surgery units. "Some hospitals put down that they have it, and it's meaningless," said Roye. "There's no dedicated space." These hospitals will do outpatient surgery, but usually the emergency room is used to prepare patients for surgery. There is no changing area, no waiting area, no relaxing recovery area, no real effort to attract patients. Roye said a hospital outpatient surgery department is effective only if it can be marketed as a special unit.

Policy Questions. The policy questions emerging from all these considerations are numerous:

- *Can we reach a point where there are too many freestanding surgery centers in North Carolina? If so, how many are too many?*

The state of North Carolina, through the Department of Human Resources, has adopted, as an official policy in the *1985 Medical Facilities Plan*, "support [for] the development and use of ambulatory surgery when it is determined to be a more cost-effective approach than inpatient surgery and does not diminish the quality of service provided."⁸ However, the Plan notes (p. 62) that "[a]n increase in the number of ambulatory surgery facilities may lead to unnecessary duplication of service capacity which could result in increases in costs per procedure and thus charges to patients."

"The critical question to me is need," said the state's Division of Facility Service's Ed Haney. "All the other stuff is secondary." However, many others are concerned that the state may already have approved far too many.

"What I think we're seeing is a system that doesn't seem to be working," said former state Sen. William G. "Gerry" Hancock Jr. (D-Durham). He said the Certificate of Need (CON) process (see sidebar on page 44) is "charged with the respon-

sibility" of making sure that new facilities don't result in under-utilization of existing facilities.

Despite CON approval of dozens of freestanding ambulatory surgical centers, the state doesn't consider hospital outpatient surgery facilities in deciding whether a new freestanding center should be approved. Why? Because hospital outpatient facilities are covered under master hospital licenses and generally are not considered in the certificate of need process for ambulatory surgery centers.

"Hospital resources are not considered that much (in estimating the need for ambulatory surgery centers) because we don't have the information," added Haney. Additional information on hospital-based and freestanding ambulatory surgery facilities will soon be available through DHR's relicensure process.

A state survey conducted in 1984 yielded that information for the first time. The survey disclosed that "at least 75% of the (hospital) facilities have additional capacity which means they could do more outpatient surgery," Haney replied. He then asked, "Are we really being cost effective if we create additional excess capacity?"

"Ambulatory surgical facilities make the most sense in connection with overutilized hospitals," said Hancock. "If the hospital is underutilized, why not do more (outpatient surgery) within the hospital?" He said in many instances, the taxpayer and the community are already committed to paying for hospital facilities. So if hospital revenues decline because of competition, tax bills may have to go up to subsidize continued hospital operation or to make the continued payments on bonds for rooms no longer in service.

Initially, said Frye Regional's John Holly, a plethora of ambulatory surgery centers could mean real price competition, and the patient in the short run would be better off. But if too many centers are built, all may lose money, and some may be forced to close. The survivors then would charge even more than before the competition began to recoup their losses. "In the long run, somebody will pay for it," Holly said.

There are growing fears among planners and doctors that too many ambulatory surgery facilities may already have been approved.

In Charlotte, five ambulatory surgery centers were approved at the same time on June 25, 1984 by William G. "Gary" Vaughn, then head of the state's certificate of need section.

Vaughn's action followed a series of steps. As is required, the applications for the five centers were first heard by the Southern Piedmont Health Systems Agency (the local component of health facilities planning in the Charlotte area).

The SPHSA's governing body, following a committee recommendation, recommended that the state approve two and deny three, finding that there was no need for five. The initial action of the certificate of need office was to approve all five. An angry SPHSA governing board, joined by the Catawba Employers Health Council (which represents 27 major employers) and the Southern Piedmont Employers Health Council (which represents 77 employers) asked for reconsideration.

Vaughn wrote that he could "find no basis on which to alter the State Agency's original decisions." He also

General Information



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Medical Center**

Cardiac Rehabilitation—Frye's Cardiac Rehabilitation Program teaches heart attack victims how to recondition their bodies and hearts in order to resume a normal lifestyle.

Rehabilitation Unit—Frye's 20-bed rehabilitation unit is the first inpatient rehab unit in a North Carolina acute care hospital. Using a multi-disciplinary approach, Frye's rehab unit provides Catawba Valley residents with services previously found only at specialized facilities outside the area. This unit allows patients and their families to stay in Hickory while accelerating the rehabilitation process. Speech pathology, occupational therapy, physical therapy, and recreation therapy are among the services offered.

Outpatient Services

Single Day Surgery—Frye offers many surgical techniques that can have you in the operating room today and at your home tonight. These procedures range from removal of a cyst to complicated eye surgery. Ask your doctor to see if Single Day Surgery is right for you.

Home Health Care Services—Frye's 24-hour Home Health Care Services allow many patients to receive nursing care in the comfort of their homes. Home services such as occupational therapy, physical therapy, speech pathology, sitter services, and homemaker services help patients hold down health care costs while receiving quality care. New durable medical equipment (DME) allows patients to rent or buy personal medical equipment while saving on medical expenses. Nutritional assessment and teaching also is available. For more information, call 324-3375 or contact your doctor.

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mentioned that some testimony "clearly embraced the notion of an enhanced competitive environment."

But that's too many, said Henley, noting that the Fayetteville Center is just beginning to get into the black after having operated for three years. "We're not nearly the competitive situation they're in," he said, citing the still low rates of outpatient surgery at Fayetteville's two hospitals.

In Charlotte, however, hospital volume already is high. At Presbyterian last year, more than half the total operations, 12,784 of 24,667, were outpatient. At Charlotte Memorial, 2,936 of 12,991 were outpatient. At Mercy, 1,070 operations — 15% of the total — were outpatient surgery, the hospital said. According to the Southern Piedmont Health Systems Agency, Orthopaedic Hospital of Charlotte did 1,633 of 5,238 as outpatients; Charlotte Eye, Ear and Throat Hospital, 940 of 3,312. That means that 19,363 of 53,341 (36%) operations in Charlotte last year were done as outpatient surgery.

Greensboro's Linder says that nationally, the best statistics indicate that 40% of all operations can be done as outpatients. Those figures exclude office surgery. That figure may be low, however, since Duke's Henderson-James notes that in Fresno, Calif., 60% of all surgery is now done as outpatient.⁹

If 40% of Charlotte's operations are done as outpatient, that would make the outpatient total 21,336, which means just 1,973 more than already are done as outpatients. Even if total operations in Charlotte increase 10% to 58,675, and 40% are done as outpatient, that's 23,470, an increase of 4,107. If 50% is a more correct supposition, that would mean 7,307 more operations than current figures.

But in their applications for certificates of need, the five approved centers projected the following: AMI Ambulatory Centers Inc. projected 5,600 operations each year; Charlotte Ambulatory Services projected 5,000; Charlotte Surgery Center projected 2,400 in 1984, 4,000 in 1985, and 4,128 in 1986; Dr. Charles Tillett projected 615 cases at his Tillett Outpatient Eye Surgery Center; and Presbyterian figured 4,000 cases in 1985 and 4,400 in 1986.

If these centers are counting on their projected volume to survive, then the survival of some is clearly questionable.

All centers said they planned on getting patients from outside Mecklenburg County and included those patients in their calculations, but freestanding ambulatory surgery centers already are open or approved in the surrounding counties of Iredell, Cabarrus, and Gaston. SPHSA figures show substantial hospital outpatient surgery volume already in almost all counties in the Southern Piedmont HSA area.

"If there are too many facilities, everybody

will be hurting," said Ann Sawyer, former director of government affairs for the N. C. Medical Society. "The philosophy behind the CON process is to prevent this kind of thing from happening."

Both Linder and Henley said they all can't make it. "I would be very surprised if they all get developed," said Linder.

◦ *Should any steps be taken to help hospitals in medium-sized communities buffeted by competition from independent surgery centers?*

Many experts say the smallest towns are unlikely to attract ambulatory surgery centers, because they never would pay off. Most hospitals in large cities are healthy, already operate substantial outpatient surgery programs as well as sophisticated inpatient surgery, and apparently can combat the independent centers. But in the medium-sized cities, there might not be enough surgical procedures to go around for both hospital and independent surgery programs.

◦ *Who will care for the poor?*

Duke's Henderson-James was one of many who raised that question. He said the ambulatory surgical facilities are not carrying the same percentage of poor people, or of people who might not pay their debts or Medicare and Medicaid patients, as the hospitals.

"The same commitment to charity isn't there" as it is in the not-for-profit and public hospitals, he said. He is concerned that the old and the poor "may be shut out."

◦ *Should single specialty surgery centers be permitted?*

A lot of people who have studied the field say they shouldn't. "Generally, we feel that multi-specialty operations are more cost effective," said Haney, and yet many of the current applications are from people who want to open single specialty centers — for eye surgery, plastic surgery, gynecological surgery. All could work out of multi-specialty centers.

"The problem with single use centers is that you've made a major expenditure for a limited utilization," said Greensboro's Linder. Many such centers stand idle for hours at a time. "The way a surgical center is most cost effective is to maximize utilization."

◦ *Will freestanding ambulatory surgery units really save money?*

Though that is the conventional wisdom, said Haney, it is still an open question. "We would like to see some very key information, like fee schedules, access to fees actually charged," said Haney. The rapidly rising costs of health care — and the consequently rapidly rising costs of health insurance to employers and of Medicare to the federal government — have helped turn the tide toward

ambulatory surgery.

Some independent centers charge substantially less than the comparable hospital charges for outpatient surgery, while others charge almost as much as the hospital.

In some cases, the hospital outpatient charges have come down in price to meet the freestanding centers.

Statewide, the average institutional charge for an inpatient D&C in 1982 was \$930, compared to an average of \$467 for outpatients, according to figures compiled by Blue Cross and Blue Shield of North Carolina.

Generally speaking, the *surgeon's fee* remains the same for an operation regardless of the setting — traditional hospital operating room, outpatient surgery, or independent center — so the price differences are in the *facility charges*. Similar centers in the same town or nearby communities may charge virtually the same, or their charges may be vastly different. For instance, the complete bill for cataract surgery — including an intraocular lens, the surgeon's bill and the facility — is \$2,800 at one facility and \$4,500 at another 40 miles away.

According to the Certificate of Need applications, Presbyterian's freestanding unit will average more than \$100 less than the comparable facilities run by doctors.

The crucial question for government, said John Young of the Legislative Research staff, is, "What is the cost impact on the system?" Government pays such a large share of medical bills through programs like Medicare, Medicaid, and a host of others that, "for us, everything else is peripheral if the cost saving is great," said Young. But even if the ambulatory surgery units turn out to be more expensive, he conceded, "It's difficult to stop something that already has started. That's why the bill (passed by the General Assembly) was critical." This bill [codified at NCGS 131E-146(1) and (1a)]¹⁰ redefined ambulatory surgical facilities and placed stricter requirements on which facilities qualify for licensure under the laws of North Carolina.

Glenn Wilson, chairman of the Department of Social and Administrative Medicine of the UNC-CH School of Medicine, is skeptical that ambulatory surgery will save money beyond the hospital room charge. "I'd like to see more of the cost data," he said. "Are we simply transferring money from the hospital to the doctor?" asked Wilson. "I don't mind the transfer, but if industry thinks they will save money, they may be surprised." Industry provides employees with health insurance as a benefit. Since health care has been increasingly expensive in recent years, employer costs for insurance have increased too.

•Should steps be taken to prevent doctors from

switching procedures from the office to the more expensive surgical centers?

The 1985 *State Medical Facilities Plan* notes that the potential savings associated with increased ambulatory surgery "will be realized only if the procedures would otherwise be performed on hospital inpatients. Shifting a procedure which is appropriately performed in a physician's office to an ambulatory surgery unit would not usually reduce its cost" (p. 62).

Blue Cross and Blue Shield of North Carolina found this to be a problem not long after the trend toward ambulatory surgery began, said James A. Brady, senior director of Blue Shield activities for BC/BSNC. "We began to identify an undesired movement of some predominantly 'office' procedures from doctors' offices to the expensive ambulatory surgery (centers)."

To combat it, BC/BSNC began an office surgery incentive program in late 1982 by giving doctors up to 25% more for 88 selected procedures if they were done in the office. It worked so well in increasing office surgery that Blue Cross will now expand the program for all subscribers, Brady said.

• How is quality going to be controlled in independent surgery centers? Who really will challenge whether an operation is necessary?

"We cannot control that," said Blue Cross and Blue Shield of North Carolina's Jean Hoffner. "We can monitor statistics. But employers are very much aware of what is going on," she said, and may be able to control unnecessary operations. "In my personal opinion, the more operating rooms, the more surgery," she said.

UNC's Freund doesn't see that as a problem, saying it is wrong to believe "consumers are so ignorant they will let doctors do things to them that are painful or unnecessary."

Neither do most of the centers. Both Fayetteville Ambulatory Surgical Center and Surgical Center of Greensboro have large staffs and have quality control committees just like those in hospitals, with doctors looking over the shoulders of other doctors, reviewing charts and specimens.

In smaller centers, like Lewis Brinton's, outside doctors are brought in to go over records, Brinton said. But he adds, "If you believe in something, you will maintain good quality; everybody who works here believes in it." He concedes that standards always can be fudged — but they also can be fudged in hospitals, he said.

But UNC's Wilson is a doubter, citing studies that show that people really can't evaluate the quality of their care. The highest doctors in actual quality in one study finished third in patients' evaluation of quality, while low average quality doctors finished on top.

"The public has enough trouble buying a

television set or a car. To assume the public will know what it is buying in health care is a bad mistake. There is no evidence to prove it," said Wilson.

◦ *Should ambulatory surgery centers be permitted to hold patients for observation for more than 24 hours?*

In the 1984 session of the General Assembly, some physicians pressed for a statute that would allow a patient to remain in the center for more than 24 hours, perhaps as long as 72 hours.

The rewriting of the definition of ambulatory surgical facilities limited patients to less than 24 hours. That doesn't apply to the outpatient surgery departments of hospitals because patients can easily be moved into hospital observation units.

Hancock said the legislative committee simply did not want to go beyond 24 hours. Numerous persons said that if there are beds, and patients stay overnight, why isn't that a hospital? "I understand that 80% of hospital patients are in and out in 72 hours," said Hancock.

Henley agrees with the number, but points out that if the surgery centers were permitted to keep patients overnight, "we could do 60-65% of all surgery outside the hospital." Current estimates are that up to 40% of all surgery can be done in an ambulatory surgery center.

Henley said surgical patients "pay a tremendous price to subsidize people who are more ill." He said three to four observation beds could be added at little capital costs, but with savings for the consumer.

◦ *Should outside interests — multi-institutional, investor-owned corporations based outside of North Carolina — be permitted to operate ambulatory surgery centers?*

"The first round of facilities were all home grown," noted BC/BSNC's Hoffner. "Now outside interests are coming in. People are saying that North Carolina is lenient for CON approval."

Duke's Henderson-James said, "What I worry about is the general loss of community control over the delivery of institutional health care."

◦ *What happens if something goes drastically wrong during a surgical procedure at a freestanding facility? Should independent ambulatory surgical centers, birthing centers and urgent care centers be forced to spell out referral plans in advance?*

UNC's Glenn Wilson thinks they should. "Nearly all (ambulatory surgical procedures) go extremely well," he said, "but a few turn sour."

But as yet there are no organized regional referral plans in North Carolina, he said. When a patient runs into trouble in the middle of an operation, "time is then of absolute importance," and a patient should be rapidly transferred to a facility equipped to handle that problem.

"We need, as a matter of public policy, to state that you will not get a license unless you have worked out how you are going to get a patient to the proper place," Wilson said. He also sees a problem with ambulatory surgery patients who suddenly need blood. "What do you do?" he asked. "This is another tough problem that has not been thought through."

North Carolina Laws on Ambulatory Surgical Facilities. North Carolina has required licensing of ambulatory surgical facilities since 1978. However, as originally adopted, the definition of ambulatory surgical facilities was fuzzy, allowing (but not requiring) physicians to apply for licenses if they believed the surgical suite they planned would fall within the definition of the statute and not simply be office surgery. The laws governing ambulatory surgical facilities are in Chapter 131E, Part D, (Sections 131E-145 to 131E-152) of the N. C. General Statutes.

In 1984, the General Assembly adopted a much more precise definition of an ambulatory surgery program as providing "on a same-day basis those surgical procedures which require local, regional or general anesthesia and a period of post-operative observation to patients whose admission for more than 24 hours is determined, prior to surgery, to be medically unnecessary."

Growth of Outpatient Surgery Procedures. The growth of outpatient surgery has been startling. Blue Cross and Blue Shield of North Carolina monitors 18 surgical procedures on their subscribers, ranging from removal of tonsils, D&Cs, and therapeutic abortions to abdominal hernia repairs, cataract surgery, removal of breast lumps and skin grafts. BC/BSNC panels of doctors believe these operations can be done on an outpatient basis — so they use them as a gauge on how well outpatient surgery is catching on.

Table 4.3 describes the number of procedures performed inpatient and outpatient for seven of these procedures in 1982. Table 4.4 on page 64 compares populous counties.

In 1982, surgeons in only two counties performed 60% or more of these 18 operations on an outpatient basis, while in 13 counties, less than 20% had been done as outpatients. In another 53 counties, between 20% and 40% of these operations had been done as outpatients.

By 1983, just one year later, all counties performed at least 20% of these operations on an outpatient basis and the number of counties between 20% and 40% had shrunk to 25. But nine counties surpassed 60%, and two, Caswell and Hoke, reached 80%.

Those figures mask some wide variations that

Table 4.3: Number of Seven Surgical Procedures Performed Inpatient and Outpatient and Proportion Performed Outpatient

	Inpatient	Outpatient	Total	% Outpatient
Myringotomy, Tonsillectomy,				
Adenoidectomy ^a	2,366	1,150	3,516	32.7%
Dilation and Curettage ^b	1,977	1,488	3,465	42.9%
Laparoscopy w/ Tubal Ligation ^c	980	1,811	2,791	64.9%
Inguinal Herniorrhaphy ^d	1,581	61	1,642	3.7%
Excision of Breast Mass	858	620	1,478	41.9%
Vasectomy	27	317	344	92.2%
Circumcision	214	149	362	41.0%
Total	8,003	5,596	13,599	41.2%

Includes Freestanding Ambulatory Surgical Centers. Excludes Central Certification, FEP, Home and Host Bank episodes

^a Myringotomy: insertion of tubes in ear. Tonsillectomy and adenoidectomy: removal of tonsils and adenoids.

^b Dilation and Curettage: scraping of the uterus.

^c Laparoscopy with tubal ligation: insertion of endoscopic device into the abdomen and tying off the tubes that run from the ovaries to the uterus.

^d Inguinal herniorrhaphy: repair of abdominal hernia.

Source: Blue Cross and Blue Shield of North Carolina, 1982

still exist among the counties in acceptance of the concept of doing these 18 operations on an outpatient basis. Both physicians and insurance companies attribute those variations to physician practice patterns.

Take D&C. According to BC/BSNC calculations, outpatient D&Cs are 55% cheaper than inpatient D&Cs. Statewide, 1,348 of the 2,545 D&Cs on Blue Cross and Blue Shield of North Carolina subscribers were done as outpatients in 1983 — an average of 53%. All the metropolitan counties were higher than that, but the averages varied from 66.7% in Durham County to 85.3% in Pitt County (Greenville).

Or take repair of abdominal hernia — once exclusively an inpatient procedure, but one that is 62% cheaper when done as outpatient surgery. The statewide average among Blue Cross and Blue Shield of North Carolina subscribers is still only 11.7% — 271 of 2,323 operations. The range is wide in the metropolitan counties, from 5.3% in Guilford and 8.8% in Wake to 30.2% in Pitt.

Or removal of the tonsils and adenoids, performed only 9.1% of the time across the state as outpatient surgery — and still approved for hospital admission by Mecklenburg's PAR program. None of those operations were done as outpatient procedures in Buncombe and Orange Counties, while Durham reached 25%. Henley says he did 51 or 52 of the 70 cases he had last year on an outpatient basis.

The same variations occurred for most of the

18 operations. (See Table 4.4.) Overall, "The estimated savings for the increased amount of ambulatory surgery in 1980-83 has been \$3.8 million" for Blue Cross and Blue Shield of North Carolina subscribers for seven of those 18 procedures, according to James A. Brady, senior director of Blue Shield Activities for BC/BSNC, "and \$13.6 million for the entire population of North Carolina."

Brady said that before BCBSNC began its first-in-the-nation statewide campaign in 1979 to stimulate outpatient surgery, seven hospitals already were using outpatient surgery extensively. In seven kinds of surgery monitored initially (all but two — vasectomy and circumcision — are part of today's 18 procedures), these hospitals were doing more than half on an outpatient basis.

Though many hospitals improved outpatient surgery rapidly during the first Blue Cross and Blue Shield of North Carolina campaign, in 1980 and 1981, "It was clear that there were some communities where ambulatory surgery was still not an alternative to our subscribers and did not appear likely in the future," said Brady.

The second campaign was designed to use employers and subscribers to force hospitals and doctors to change. "This influence was needed to counterbalance the hospital administrators' concern over the loss of inpatient revenue and the physicians'

—continued page 69

Table 4.4: Physician Practice Variations — Percent of Ambulatory Surgery Procedures for Blue Cross and Blue Shield of North Carolina Subscribers, January-September 1984

PROCEDURE	NAME OF COUNTY									
	Bunc.	Cumb.	Durh.	Fors.	Guil.	Meck.	N. Han.	Orange	Pitt	Wake
Myringotomy	60	93.5	93.8	100	96.6	100	83.9	85.7	100	100
Removal of Tonsils and Adenoids	0	5.6	14.3	4.3	18.8	12.2	0	21.4	21.7	6.9
Abdominal Hernia Repairs	10.0	45.5	18.2	16.3	12.0	16.3	14.3	30.8	20.0	19.5
Excision of Breast Mass	37.5	75.0	67.4	51.1	64.1	40.7	63.6	85.7	60.0	51.6
D&C	75.0	55.0	72.4	75.3	71.0	67.7	60.4	57.1	81.3	76.2
Laparoscopy w/wo Tubal Ligation	20.0	81.3	83.3	75.0	81.0	74.4	64.3	92.9	89.5	81.0
Marsupialization	—	100	0	40.0	100	100	50.0	100	66.7	62.5
Therapeutic Abortion	0	100	50.0	100	83.3	60.0	100	33.3	100	25.0
Insertion of Intraocular Lens	0	60.0	23.5	53.7	81.1	9.7	66.7	25.0	81.8	46.7
Arthroscopy	5.0	52.9	14.3	39.1	71.2	42.0	70.6	47.1	93.3	73.6
Carpal Tunnel Decompression	60.0	87.5	88.9	81.8	80.0	41.2	100	100	80.0	75.8
Excision of Ganglions	50.0	100	87.5	80.0	100	100	87.5	—	83.3	100
Excision of Mortons Neuroma	33.3	100	0	62.5	75.0	60.0	0	—	50.0	81.8
Skin Grafts	—	50.0	50.0	75.0	100	76.9	88.9	80.0	100	83.3

Note: operations were done in acute care hospitals or freestanding ambulatory surgery facilities.

A — means no operations were performed, while an 0 indicates all were performed on inpatients.

Source: Blue Cross and Blue Shield of North Carolina

Table 4.5: Hospital-Based and Freestanding Ambulatory Surgery Facilities in North Carolina, August, 1984

Facility	County	Hospital Based	Free Standing	No Ambulatory Surgery
<i>HSA I</i>				
Alexander County Hospital	Alexander			X
Alleghany County Memorial	Alleghany			X
Ashe Memorial*	Ashe			X
Sloop Memorial	Avery	X		
Charles A. Cannon Memorial	Avery			X
St. Joseph's Hospital	Buncombe	X		
Asheville Hand Ambulatory Center	Buncombe		X	
Drs. Keller, Mauney, Claxton, Bilbey & Assoc.	Buncombe		X	
Western N.C. Ob/Gyn	Buncombe		X	
Memorial Mission	Buncombe	X		
Grace Hospital	Burke			X
Veterans Administration Hospital	Burke			X
Valdese General	Burke	X		
Blackwelder Hospital*	Caldwell	X		
Caldwell Memorial	Caldwell			no report
Hickory Memorial*	Catawba			X
Frye Regional Medical Center*	Catawba	X		
Catawba Memorial	Catawba			X
Murphy Medical Center	Cherokee			X
Mountain Park Medical Center	Cherokee			X
Crawley Memorial	Cleveland			X
Kings Mountain	Cleveland			X
Cleveland Memorial	Cleveland	X		
Haywood County	Haywood	X		
Fletcher Hospital	Henderson			X
Margaret Pardee Memorial	Henderson	X		
C.J. Harris Community	Jackson	X		
Highlands-Cashiers Hospital	Macon			X
Angel Community*	Macon			X
The McDowell Hospital*	McDowell	X		
Blue Ridge System* (Spruce Pine)	Mitchell	X		
St. Luke's Hospital	Polk	X		
Rutherford Hospital	Rutherford			X
Swain County	Swain			X
Transylvania Community	Transylvania	X		
Blowing Rock Hospital	Watauga			X
Watauga Hospital	Watauga	X		
TOTAL		15	3	18

*Indicates an investor-owned or managed hospital.

Source: 1985 State Medical Facilities Plan, Department of Human Resources, Division of Facility Services, pp. A-12 to A-17.

—table continued next page

Table 4.5, continued

Facility	County	Hospital Based	Free Standing	No Ambulatory Surgery
<i>HSA II</i>				
Memorial Hospital of Alamance County	Alamance	X		
Alamance County Hospital	Alamance	X		
Lexington Memorial	Davidson	X		
Lexington Clinic for Women	Davidson		X	
Community General of Thomasville	Davidson	X		
Davie County	Davie			X
Medical Park Hospital*	Forsyth	X		
N.C. Baptist Memorial	Forsyth	X		
Forsyth Memorial	Forsyth	X		
Philip McKinley, M.D. Plastic Surgery Center of N.C.	Forsyth		X	
Foundation Health Care	Forsyth		X	
Humana of Greensboro*	Guilford	X		
L. Richardson Memorial	Guilford	X		
High Point Memorial	Guilford	X		
Wesley Long Community Hospital	Guilford			X
Moses Cone Memorial	Guilford	X		
Pinewest Center	Guilford		X	
Carolina Birth Center	Guilford		X	
Outpatient Surgical Center	Guilford		X	
Surgical Center Greensboro	Guilford		X	
Southeastern Eye Center	Guilford		X	
Randolph Hospital	Randolph	X		
Morehead Memorial*	Rockingham			X
Annie Penn Memorial	Rockingham	X		
Stokes-Reynolds Memorial	Stokes			X
Hugh Chatham Memorial*	Surry			X
Northern Hospital of Surry County	Surry			X
Hoots Memorial	Yadkin			X
TOTAL		13	9	7
<i>HSA III</i>				
Cabarrus Memorial	Cabarrus	X		
Gaston Memorial	Gaston	X		
Drs. G.D. Jacobs & H.F. Thomas	Gaston		X	
Lowrance Hospital*	Iredell			X
Davis Community Hospital*	Iredell	X		
Iredell Memorial	Iredell	X		
Brinton Surgical Center	Iredell		X	
Gordon Crowell Memorial*	Lincoln			X
Lincoln County	Lincoln	X		

—table continued next page

Table 4.5, continued

Facility	County	Hospital Based	Free Standing	No Ambulatory Surgery
Charlotte Eye, Ear & Throat	Mecklenburg	X		
Huntersville Hospital	Mecklenburg	X		
Orthopaedic of Charlotte*	Mecklenburg	X		
Mercy Hospital	Mecklenburg	X		
Presbyterian Hospital	Mecklenburg	X		
Charlotte Memorial	Mecklenburg	X		
Tillett Outpatient Eye Surgery Center	Mecklenburg		X	
Charlotte Ambulatory Surgery Center	Mecklenburg		X	
Charlotte Ambulatory Service	Mecklenburg		X	
AMI Ambulatory Centers	Mecklenburg		X	
Cabarrus Ophthalmological Clinics	Mecklenburg		X	
Rowan Memorial	Rowan	X		
Stanly Memorial	Stanly	X		
Union Memorial	Union	X		
TOTAL		14	7	2
<i>HSA IV</i>				
Chatham Hospital	Chatham			X
McPherson Hospital*	Durham			X
Durham County General	Durham	X		
Duke University	Durham	X		
Veterans Administration Hospital	Durham	X		
Franklin Memorial*	Franklin			X
Granville Hospital	Granville	X		
Johnston Memorial*	Johnston			X
Central Carolina Hospital*	Lee	X		
North Carolina Memorial	Orange	X		
Chapel Hill Surgical Center	Orange		X	
Person County Memorial*	Person	X		
Maria Parham Hospital	Vance	X		
Western Wake Hospital	Wake			X
Eastern Wake Hospital	Wake			X
Northern Wake Hospital	Wake			X
Southern Wake Hospital	Wake	X		
Raleigh Community*	Wake	X		
Rex Hospital	Wake	X		
Wake County Medical Center	Wake	X		
Fleming Center	Wake		X	
Raleigh Women's Health Organization	Wake		X	
Warren County General	Warren			X
TOTAL		12	3	8
<i>HSA V</i>				
Anson County Hospital	Anson			X
Bladen County Hospital	Bladen	X		
J. Arthur Doshier Memorial	Brunswick			X
The Brunswick Hospital*	Brunswick			X
Columbus County Hospital	Columbus	X		
Highsmith Rainey Memorial*	Cumberland			X

—table continued next page

Table 4.5, continued

Facility	County	Hospital Based	Free Standing	No Ambulatory Surgery
Cape Fear Valley Hospital*	Cumberland	X		
Fayetteville Ambulatory Surgical Center	Cumberland		X	
Good Hope Hospital	Harnett			X
Betsy Johnson Memorial	Harnett			X
Montgomery Memorial	Montgomery			X
St. Joseph of the Pines	Moore			X
Moore Memorial	Moore	X		
Carolina Eye Associates	Moore		X	
Cape Fear Memorial	New Hanover	X		
New Hanover Memorial	New Hanover	X		
Pender Memorial	Pender	X		
Hamlet Hospital	Richmond	X		
Richmond Memorial	Richmond	X		
Southeastern General	Robeson	X		
Sampson County Memorial	Sampson	X		
Scotland Memorial	Scotland			no report
TOTAL		11	2	8
<i>HSA VI</i>				
Beaufort County	Beaufort	X		
Pungo District Hospital	Beaufort			X
Bertie County	Bertie	X		
Carteret County General	Carteret			X
Sea Level Hospital	Carteret			X
Chowan Hospital	Chowan			X
Craven County	Craven			X
New Bern Outpatient Surgery Center	Craven		X	
Duplin General Hospital	Duplin	X		
Edgecombe General Hospital*	Edgecombe	X		
Our Community Hospital	Halifax			X
Halifax Memorial	Halifax			X
Roanoke-Chowan Hospital	Hertford			X
Lenoir Memorial	Lenoir	X		
Robersonville Community	Martin			X
Martin General	Martin			X
Community Hospital of Rocky Mount*	Nash	X		
Nash General	Nash	X		
Onslow Memorial	Onslow			X
Crist Clinic for Women	Onslow		X	
Albemarle Hospital	Pasquotank	X		
Pitt County Memorial	Pitt	X		
Eastern Carolina Surgical Center	Pitt		X	
Washington County	Washington			X
Wayne County	Wayne	X		
Wilson Memorial	Wilson			no report
Carolina Women's Clinic	Wilson		X	
Wilson Clinic	Wilson		X	
TOTAL		10	5	12

reluctance to change their longstanding methods of practicing medicine."

Rather than emphasizing hospitals, the second phase concentrated on numbers "whether that be in a target hospital, neighboring hospitals, or freestanding facilities," said Brady.

It worked. The amount of ambulatory surgery "more than doubled, from 19% to 44%" in the selected communities as measured by those seven procedures. Statewide, the outpatient percentage for those seven procedures has risen from a 25% average in 1977 through 1979 to 52% in 1984.

Nonetheless, Dr. Sandra Greene, senior director for health economics research for BCBSNC, noted that use still varies widely by county, from 13% to 71%. This range of use is most likely attributable to the varying degree of acceptance of outpatient procedures among physicians. (See Section IV for more on physician practice patterns.) □

¹The Mecklenburg County Health Care Cost Management Council is a nonprofit action — not study — program aimed at holding down health care costs. It is a leadership group of physicians, hospitals, businesses, insurers, civic organizations and government representatives formed in 1983 to devise cooperative strategies for cost containment without sacrificing quality health care. Though the council has received support from the N.C. Foundation for Alternative Health Programs and a \$1.5 million operating grant from the Robert Wood Johnson Foundation, 54% of the operating budget is raised locally. Council staff members *operate* the expanding PAR program and will run portions of a second major thrust of the council — providing affordable health care for the elderly. There is also a council-run data analysis project, which will enable businesses to compare their insurance cost experience with other firms.

²According to Executive Director George Stiles, the PAR program makes *medical* decisions, not insurance decisions. But the Mecklenburg County Medical Society's large insurance program for office staff employees says simply, "Without PAR certification, we don't pay," while other participants, like Southern Bell, treat the opinion as advisory, without sanctions. Most participating firms are in between, Stiles said.

See the summary of private review programs published in the March 1985 issue of the *Mecklenburg County Medical Society Bulletin*, where Amy Blackwell, administrative director of information services for Presbyterian Hospital, summarized 16 private review programs in Mecklenburg County.

Presbyterian employees are part of the PAR program.

³1985 *State Medical Facilities Plan*, p. 119.

⁴NCGS 131E-176(1).

⁵The Medical Facilities Plan, a component of the State Health Plan, is updated and published each year by the Department of Human Resources' Division of Facility Services. Its "purpose is to guide the State in assuring its citizens adequate access and availability to quality health care at a reasonable cost." By organized state and local level planning and control of the numbers of facilities and beds licensed, this planning mechanism attempts to meet this stated purpose.

⁶Experts caution, however, that the case mix may be different between Presbyterian's facility and other ambulatory surgery facilities. One reason for believing that is Presbyterian's intention to maintain its outpatient surgery department, which means the tougher cases probably will go there. If average cases in the ambulatory surgery center across the street are easier than in competing ambulatory surgery centers, then it follows that they probably also will be cheaper.

⁷See *Grantseeking in North Carolina: A Guide to Foundation and Corporate Giving*, N.C. Center for Public Policy Research, July, 1985, pp. 9, 11, 15, 110-113.

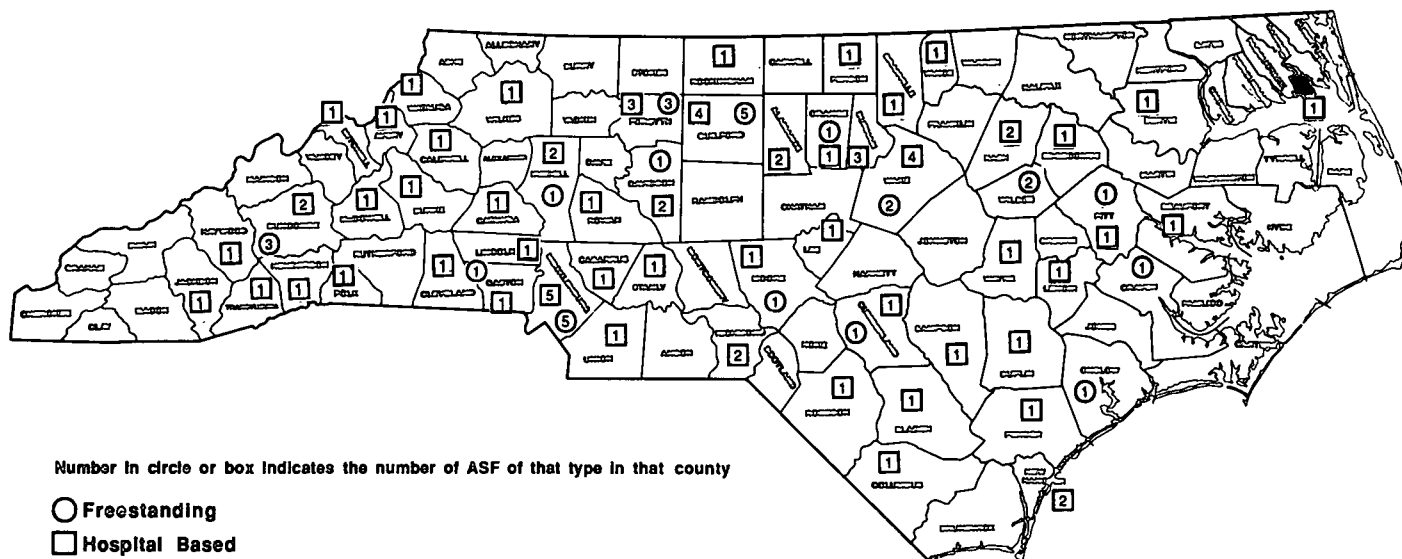
⁸*Op. cit. Medical Facilities Plan*, p. 61.

⁹It should be noted, however, that it is very difficult to compare percentages because there is no commonly agreed upon distinction between office surgery and ambulatory surgery and no consensus on what procedures to include when a percentage is calculated.

¹⁰NCGS 131E-146(1) and (1a): (1) "Ambulatory surgical facility" means a facility designed for the provision of an ambulatory surgical program. A regional ambulatory surgical facility serves patients who require local, regional or general anesthesia and a period of post-operative observation. An ambulatory surgical facility may only admit patients for a period of less than 24 hours and must provide at least one designated operating room and at least one designated recovery room, have available the necessary equipment and trained personnel to handle emergencies, provide adequate quality assurance and maintain adequate medical records for each patient. An ambulatory surgical facility may be operated as a part of a physician's or dentist's office, provided the facility is licensed under G.S. Chapter 131E, Article 6, Part D, but the performance of incidental, limited ambulatory surgical procedures which do not constitute an ambulatory surgical program as defined in subdivision (1a) and which are performed in a physician's or dentist's office does not make that office an ambulatory surgical facility.

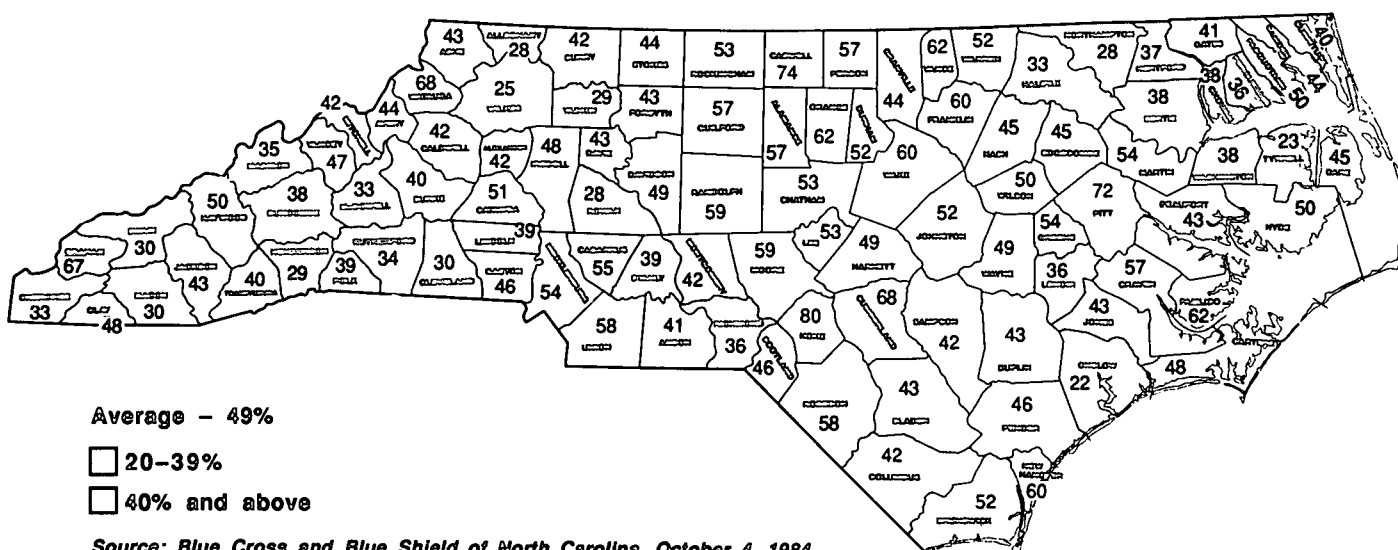
(1a) "Ambulatory surgical program" means a formal program for providing on a same-day basis those surgical procedures which require local, regional or general anesthesia and a period of post-operative observation to patients whose admission for more than 24 hours is determined, prior to surgery, to be medically unnecessary.

Map 4.1: Ambulatory Surgery Facilities in North Carolina, August 1984



Source: 1985 State Medical Facilities Plan, p. A-18.

Map 4.2: Percent of 18 Surgical Procedures Performed in an Ambulatory Setting in Each County in 1983



Source: Blue Cross and Blue Shield of North Carolina, October 4, 1984

CHAPTER IV
Section II

HEALTH MAINTENANCE ORGANIZATIONS ARRIVE IN NORTH CAROLINA*

by Robert Conn

What are Health Maintenance Organizations (HMOs) and where did they come from? What are the main differences in group practice and individual practice association HMOs? What are the advantages and disadvantages claimed by HMO supporters and skeptics? Specifically, do HMOs help hold down health care costs? Finally, what policy questions lie ahead for North Carolina policymakers and regulators? This article answers these questions in an effort to provide a primer on the HMO wave hitting the North Carolina health care scene.

Nearly five decades after it began in California, a prepaid approach to health care has finally taken hold in North Carolina and is growing rapidly. The approach is called a Health Maintenance Organization, HMO for short. HMOs aim at holding down costs while improving care. While critics have raised questions about whether HMOs can adequately serve the entire population as well as traditional fee-for-service health care, HMO advocates point to the benefits for consumers, doctors, and businesses.

To the consumer, HMOs mean an end to nearly all medical claims forms, co-payments, deductibles, and other inconveniences Americans have come to expect in getting medical care. Instead, people who choose to become a member of an HMO pay a set monthly fee in advance for comprehensive primary health services — checkups, routine tests, immunizations, treatment of illness and injury, and hospitalization.

To the doctor, HMOs reverse incentives, from an approach in which more service means more money to an approach in which income increases as costs are held down. HMOs accomplish this by having doctors share in the financial risk when their patients get sick. In other words, doctors can benefit by working to keep their patients well.

To the businessman, HMOs offer a chance of stanching the hemorrhage on their company's profits caused by ever-rising health care costs. HMOs can dramatically lower the use of hospitals and perhaps paperwork as well.

The wave of HMOs hitting North Carolina has brought added responsibilities to state officials. The growth of HMOs poses a threat to some hospitals because HMO members use hospitals far less often than people with traditional health insurance. Health policy planners will have to incorporate the HMO model into their long-range planning. In addition, and more immediately, HMOs offer new challenges to the N.C. Department of Insurance, which has the responsibility for licensing and monitoring the operation of HMOs in this state.

As of January 1985, at least six different HMO plans are operating around the state, several of them in more than one city (see box on page 77). North Carolina has one veteran HMO, called Winston-Salem Health Care Plan, which R.J. Reynolds has operated for its employees for years. In the last two years, several major national HMO organizations have come into the state. And there is talk of more.

**This part of Chapter IV originally appeared as an article in the N.C. Center's quarterly magazine, North Carolina Insight, Vol. 7, No. 3 (February 1985). This was a thematic issue looking exclusively at aspects of insurance regulation in North Carolina. However, since Health Maintenance Organizations also affect the hospital industry, we are including the article in this study of investor-owned hospitals.*

In 1982, Blue Cross-Blue Shield (BC/BS) of North Carolina started the first publicly available HMO in North Carolina. Called the Personal Care Plan, it has signed up, in Forsyth County alone, 50 percent of the employees of Forsyth County, 45 percent of those at Piedmont Publishing Co., and 60 percent at Unique Furniture Makers. "We're averaging 30 to 35 percent," said John Sharp, executive director of alternative delivery systems for Blue Cross and Blue Shield of North Carolina. "Normally 10 to 12 percent is very good."

In 1984, HealthAmerica, the nation's largest independent, investor-owned, operator of HMOs, began functioning in the state. In its first seven months, it signed up 17,800 members. Among employee groups, the participation rate has reached as high as 66 percent (Durham city employees, 820 of 1,250).

Three other major groups have laid the groundwork — getting licensed, signing up doctors, preparing the administrative base, etc. — and are scheduled to begin serving patients in early 1985: Kaiser-Permanente, PruCare, and Carolina Medical Care. By January 1, 1985, an estimated 36,600 North Carolinians were enrolled in the five HMOs open to the public.¹

The growth of HMOs in North Carolina trails the national trend. From 1977 to 1983, membership in HMOs nationally more than doubled, from 6.3 million to 13.6 million.² By the end of 1983, 290 HMOs were in operation, according to an analysis by InterStudy, a Minneapolis-based health policy research organization. The report shows 48 metropolitan areas have at least four HMOs. Boston,

Los Angeles, San Francisco, Providence, Anaheim, and Philadelphia have at least 10.

In California, HMOs claim 21 percent of the population as members, followed by 17 percent in Minnesota, and 10 percent in Arizona. Nationally, InterStudy projects 50 million HMO members by 1993. At least six national HMO organizations — Kaiser Permanente, Blue Cross and Blue Shield, HealthAmerica, Prudential, CIGNA, and Maxicare — are rated by experts as strong enough to go into virtually any new market with assurance of success.

The gains have come despite a shaky period in the 1970s, when a number of HMOs failed. Today, complete HMO failures are rare, thanks in part to tightening state and federal laws and tougher supervision by state insurance departments around the country. In addition, national HMOs have been willing, even eager, to assist and perhaps take over floundering local HMOs. Usually, these weak HMOs become sound under new management.

In 1980, for example, HealthAmerica, a for-profit corporation, came to the rescue of Penn Group Health Plan in Pittsburgh. Founded in 1974 and in financial trouble by the late '70s, Penn Group required shoring up by millions in federal loans. HealthAmerica offered capital, management, and marketing expertise to Penn Group in exchange for a long-term management contract and an option to buy. Since then, Penn Group has grown from 19,000 to over 50,000 members, and HealthAmerica has moved to exercise its option to buy.³

In another example, Kaiser Permanente Medical Care Program has taken over the operation of several financially troubled HMOs, one in Wash-



ington, D.C., and one in Hartford, Connecticut, and made them successful. Since Kaiser Permanente rescued the Georgetown Community Health Plan in Washington, its membership has grown from 50,000 to 140,000.

Yet all HMOs do not survive. The Moshannon Valley Comprehensive Health Care Program, sponsored by Pennsylvania Blue Shield and Blue Cross of Western Pennsylvania, stopped operating in July 1984.⁴

Experts express concern that most states, North Carolina among them, have not yet geared up insurance department staffing to properly monitor HMOs. And there is a more fundamental concern.

"As the HMO achieves a more pivotal role in the nation's health care delivery system, the responsibilities of state regulators become more difficult and more important," says a report by Aspen Systems Corp. prepared for the Federal Bureau of Health Maintenance Organizations.⁵ "Officials must be aware of the delicate balance between too much or inappropriate regulation that impedes HMO development and operation and too little regulation which may endanger HMO subscribers. Clearly, some regulation of HMOs is necessary and desirable to protect the consumer of HMO services from fraud or financial loss."

How HMOs Work — the Basics

The HMO movement began in 1929 with the Ross-Loos plan in Los Angeles, where physicians formed a group practice prepayment plan. It is still in existence today, as are two other early HMOs — the Kaiser Permanente Medical Care Program, founded in California in 1934, and the Group Health Association, formed in Washington, D.C., in 1937. Today, Kaiser Permanente serves 4.6 million members and is signing up members in North Carolina.⁶

Numerous variations have evolved on the basic HMO theme, but there are two broad types: the Group Practice Model and the Individual (or Independent) Practice Association (IPA). Both types of HMOs deliver comprehensive health services for a fixed prepaid monthly fee. Under both systems, HMO patients are guaranteed specified services regardless of how many times they see the doctor, and the doctor gets paid even if the patient rarely needs attention. Joining an HMO is always voluntary, and a person has a choice, annually, whether to change plans. An HMO, the group practice or IPA model, might be for-profit or not-for-profit, and either model could be part of a national chain or a local, independent organization.

Group Practice Model. Group practice HMOs provide out-patient services in one or several medical offices owned or operated by the plan. All

primary care is provided in those facilities, which usually offer extended hours and essentially one-stop service. With group practice HMOs, patients have fewer choices of primary care physicians than with the IPA model.

Three of the groups now either operating or in the planning stages for North Carolina are following the group practice model. The California-based Kaiser Permanente Program, which is non-profit, is starting a group-practice HMO in the Raleigh-Durham-Chapel Hill area.

Called the Kaiser Permanente Medical Care Program, the HMO will initially provide primary care by developing their own medical group (probably only four doctors in the beginning). This for-profit group, called Carolina Permanente Medical Group, will be responsible for all professional services to the HMO members and for contracting with local physicians for specialty care. The group physicians work entirely with HMO members, who may choose their personal doctor among the group's physicians.

The Kaiser Permanente HMO will have enough doctors to take evening calls, said Alvin Washington, vice president and regional manager for the national Kaiser Permanente organization, and will contract with area specialists as needed. Eventually, the group will add specialists to the full-time staff and projects having 14 physicians by the end of 1985. Washington does not expect the group to operate a hospital, like some Kaiser Permanente units on the west coast, but rather to contract with existing community hospitals for in-patient care.

Another group practice model in North Carolina is PruCare of Charlotte, a subsidiary of the Prudential Insurance Company of America. PruCare is affiliating with the Nalle Clinic, a multispecialty group practice with more than 50 physicians at three sites. PruCare members will go to the Nalle Clinic for primary care, and for most specialty care.

The Winston-Salem Health Care Plan is an even more restrictive group practice arrangement. It uses a staff model with salaried physicians. It does make referrals for specialty care.

The Individual (or Independent) Practice Association (IPA). HMOs following the IPA model use existing primary care physicians who work in their own offices and continue to see their traditional fee-for-service patients. In most IPAs, the patient has a choice among participating primary care doctors — internists, family physicians, pediatricians, and sometimes obstetrician-gynecologists. Doctors may belong to more than one IPA group, as many have done in Charlotte. Three of the six HMOs in North Carolina are using the IPA model.

The Blue Cross-Blue Shield Personal Care Plan, the oldest IPA in North Carolina, has signed up about 900 physicians in the Research Triangle area,

including primary-care doctors and specialists. So far, 15,000 people have enrolled as patients. The BC/BS plan has a similar track record in Winston-Salem (140 doctors and 3,500 patients signed up) and in Charlotte (135 doctors and 250 patients). These numbers are as of January 1985.

A key element to the BC/BS HMO is its risk fund. Specialists agree to accept reimbursement from the plan as payment in full, with part of that payment going into a risk fund. If the program has a surplus, the doctors get back the money from the risk fund at year's end. In addition, doctors receive half of the year's overall surplus in the program, a further incentive to hold down costs.

The second IPA model to develop in the state is the HealthAmerica variation, where *primary care* doctors contract with the HMO. HealthAmerica refers to these physicians as the "gatekeepers" of the HMO members' health care needs. The primary care doctors determine when their patients need specialists and then arrange for that care on a fee-for-service basis. The primary care doctor has financial incentives to find a cost-effective specialist — one who offers the most appropriate care at the most reasonable cost. The specialist, for example, could charge more for his services but get the patient out of the hospital faster, making the overall bill lower than that from another doctor with lower fees. Unlike some IPAs, HealthAmerica does not restrict referral. Primary care doctors may use the services of any appropriate specialist.

The number of primary care doctors in HealthAmerica's network as of January 1985 are: 41 doctors in 13 locations in Charlotte, 76 physicians in 26 locations in the Triangle area, 73 physicians in 32 locations in the Triad, and 28 doctors in 5 locations in Greenville, where the group began service in January.

The third IPA-type program is Carolina Medical Care in Charlotte, where primary care doctors will receive a fixed monthly fee. Specialists will be paid based on a set of uniform fees. All participating doctors will share in hospital savings. In all, 378 Charlotte doctors have joined Carolina Medical Care. When the overwhelming majority of a city's primary care doctors have affiliated with an IPA, as is the case with Carolina Medical Care, the odds are great that a person can sign up for the IPA and go on seeing the same doctor.

Federal Regulations and State Responsibilities

The national corporations may use different models in different locales to suit the local situation. Blue Cross and Blue Shield has 57 HMOs nationally, with

1.8 million members. They include 8 staff models, 10 group practice models, and 39 that are classified under federal standards as IPAs, although 26 are variations.

Christina Bowesz of the federal office of HMOs points out that since federal law requires employers, if asked, to offer both an IPA and a group practice HMO, companies starting business against a dominant local HMO will nearly always opt for the other model.

The federal requirement stems from the HMO act, which Congress passed in 1973. The act encouraged the development of HMOs by providing money for new ones, overriding restrictive state laws, and granting federal qualification to any HMO that met specific requirements (see box on page 75). The 1973 law requires an employer of 25 or more persons to offer employees the option of joining an HMO if the company provides conventional health insurance and if a federally-qualified HMO asks the company for access to the employees.

The Reagan administration has since eliminated the grants, but the rest of the program is intact. More and more HMOs, including most of those in North Carolina, say they are seeking federal qualification. Kaiser Permanente, for example, became federally qualified in the state, effective January 1985.

The entrance of HMOs into North Carolina came about as the direct result of the actions of the N.C. Commission on Prepaid Health Plans, which recommended the establishment of a nonprofit corporation to stimulate alternative health programs. The result was the N.C. Foundation for Alternative Health Programs, which not only has stimulated development of HMOs, but also encouraged other cost-cutting measures.⁷

Glenn Wilson of the UNC School of Medicine, who chaired the commission, is proud of another result — revision of the state's HMO act. He said the revisions made the act substantially better than the national model act proposed by the National Association of Insurance Commissioners.

North Carolina's HMO Act, Chapter 57B of the N.C. General Statutes, is considered close to the national model HMO law, with some major exceptions. The law gives the N.C. Insurance Commissioner the job of granting HMOs a certificate of authority (i.e., a license to operate) and the task of monitoring their operations. The type and degree of monitoring depends in large part upon the skill of the Insurance Commissioner and his staff. The law allows for monitoring of virtually all aspects of an HMO operation, from its advertising to its contracts with doctors. The state law, unlike the federal law, does not, however, specify the minimum services an HMO must deliver.

Advantages of HMOs

In promotional literature, HMOs list at least five reasons why *employees* like HMOs:⁸

1. *Coverage that is comprehensive and stresses preventive care.* Because check-ups, immunizations, and pregnancy care are provided under the single monthly fee, HMOs are far more comprehensive than traditional health insurance.

2. *No hidden or surprise costs.* The patient doesn't have to worry about taking a checkbook to the doctor's office, nor about deductibles or coinsurance.⁹

Instead, HMOs turn medical care into a fixed monthly cost, rather than one of the scariest variables in a household budget.

3. *Quality care.* This claim is more difficult to document, and in fact is one area in which traditional health insurance companies challenge HMOs. But HMOs argue that since the primary care doctor becomes the patient's advocate in selecting specialists, higher quality specialists are chosen than when the patient is left to his own devices. In

addition, HMOs point to their organized quality assurance system, a system that does not exist in most fee-for-service situations.

A recent American Medical Association study noted the difficulty in measuring quality, but found after studying HMOs, "The medical care delivered by the HMOs appears to be of generally high quality." The comment is important because at one time, organized medicine opposed HMOs.¹⁰

In 1980, Dr. John Williamson of Johns Hopkins School of Hygiene and Public Health and one of his students analyzed 27 studies that compared care received by group practice HMO members with those in fee-for-service. In 19 studies, the quality of care in HMOs was superior, and in the remaining 8, it was rated as equivalent. None of the studies showed HMOs had lower quality. They concluded, "There is little question that facility-based HMO care [i.e., group practice] is at least comparable to care in other health care facilities, if not superior."¹¹

4. *No claims forms.* They're not needed except in rare instances when a patient goes outside the prepaid system for a service that is included.

What is an HMO?

A health maintenance organization provides comprehensive care under a fixed, prepaid fee arrangement. Patients are guaranteed care for this price, regardless of how many times they visit the doctor. Doctors contract with the HMOs and usually have some financial incentives to help keep patients well. HMO models range from single clinic sites with staff physicians (where patients have a minimum of choice as to which doctor) to arrangements where most doctors in the city can affiliate with an HMO (allowing most patients to keep their same doctor). HMOs fall into two general categories: the group practice model or the IPA (Individual Practice Association) model (see main article for more).

If HMOs are "federally qualified," they probably achieve added credibility. In past years, federally qualified HMOs also could receive federal financial assistance. To be federally qualified, an HMO must offer these minimum services:

- Physician services — including primary care doctors, consultants, and referrals.
- Inpatient and outpatient hospital services.
- Emergency services, both in and outside the HMO's service area.
- Diagnostic laboratory services.
- Both diagnostic and therapeutic radiology.
- Home health services.
- Preventive health services, including periodic health examinations for adults, well-child care from birth, pediatric and adult immunizations, family planning and infertility services, and eye and hearing exams for children.
- Health education.
- Medical social services.
- Mental health services, including up to 20 outpatient visits.
- Diagnosis, treatment, and referral for alcohol and drug addiction.

5. *Guaranteed access to health care.* A consumer always has a place to go — the HMO doctor. Under the traditional fee-for-service system of health care, patients might have trouble finding a doctor.

The promotional literature says employers like HMOs because they:

1. *Help control health care costs.* Not only are hospitalization rates substantially lower than under traditional fee-for-service plans, but doctors are given incentives to increase efficiency and cut costs while maintaining quality of care.

2. *Stimulate competition.* The HMOs cite studies in New York, Minneapolis-St. Paul, Hawaii, and Rochester that show that traditional health insurance becomes more comprehensive when faced with HMO competition.¹²

3. *Encourage good health habits,* aimed at handling problems before they become expensive to treat. Because prevention is covered, members can justify annual physicals.

4. *Reduce paperwork.* They point to a hidden cost of most traditional insurance plans — the need for companies to have squads of clerks to cope with forms and claims and questions about coverage. Virtually all of this disappears with HMOs. Some national companies say those savings don't always hold, because they can deal with one insurance carrier nationally, while having to cope with a myriad of HMOs in each community.

Do HMOs Hold Down Costs?

The most important advantage claimed by HMOs is holding down health care costs. Though difficult to document, the evidence is mounting. "The evidence has been accumulating since the early 1960s that the out-of-pocket costs are significantly lower for persons involved in group practice HMOs than for persons with traditional health insurance," said Glenn Wilson of UNC.

All three major automakers now claim HMOs are saving them money. According to a report in *Business Insurance*, Ford Motor Co. says the 23 HMOs it offers employees will save it \$7 million this year over the traditional health plans. The premiums are 16 percent less than those from traditional insurers, according to Ford officials. Last year, Ford documented \$5 million in savings. Ford is planning to add HMOs in Florida, primarily for its retirees.¹³

According to *Business Insurance*, Chrysler is so supportive of its 12 HMOs that it gave away \$50,000 to HMO members who signed up non-members, at the rate of a \$50 savings bond for an individual, \$100 bond for a couple, and \$250 bond for a family. Delores McFarland, benefits administrator

for General Motors, estimates GM's savings in the millions.

Other companies, like American Telephone and Telegraph and International Business Machines Corp., aren't so sure they save money, and are still studying the question.

Meanwhile, long-term research studies add to the evidence. The most convincing is a study by the prestigious Rand Corporation recently published in the *New England Journal of Medicine*.¹⁴ This study represents a distinct departure from previous ones, because freedom to choose an HMO was eliminated. Healthy patients who had been getting traditional fee-for-service care were randomly assigned to continue fee-for-service or go to an HMO. The HMO was the Group Health Cooperative of Puget Sound (GHC), a 37-year-old HMO in Seattle that has an enrollment of 324,000 — roughly 15 percent of the Seattle-area population. The results were compared to a control group of regular GHC members. Under this study design, the Rand Corporation compared HMOs to fee-for-service systems while both were serving comparable populations with comparable benefits. The results were striking.

The rate of hospital admissions in both GHC groups was just over 8 for every 100 patients, about 40 percent less than in the fee-for-service group, which averaged nearly 14 admissions for every 100 patients. Overall health expenditures were about 40 percent less in both GHC groups (\$439 per year in the GHC experimental group, \$469 per year in the GHC control group) than in the fee-for-service group (\$609 per year). But visits to the doctor's office occurred at roughly the same rate for both groups — a little over four visits per year.¹⁵

The two GHC groups turned out to be similar in the mix of health risks, which suggests there is no substantial difference between people going for traditional medical care and those who choose HMOs. The Rand team notes the overall results were in line with previous studies showing HMOs had 10 to 40 percent fewer hospitalizations than fee-for-service physicians. The Rand study concludes, "The style of medicine at prepaid group practices is markedly less 'hospital intensive' and consequently, less expensive."

An editorial in the same issue by a well-known expert on health care costs, Dr. Alain Enthoven of Stanford University, noted that about 40 comparison studies have been done. They found that prepaid group practices reduce per capita costs some 10 to 40 percent, "largely as a result of a 25 percent to 45 percent reduction in hospital use. Although these findings have been replicated in many different employee groups and in studies that controlled for age and sex and sometimes tested for measurable differences in health status," he said, "the suspicion

HMO Enrollment in North Carolina, January 1985

HMO	Location	Doctors	Enrollees
Blue Cross and Blue Shield of N.C.:	Triangle	900	15,000
	Winston-Salem	140	3,500
	Charlotte	135	250
Personal Care Plan	Greensboro	100	250
	Total	1,275 ¹	19,000
Carolina Medical Care	Charlotte	128 (prim. care)	300
		250 (specialists)	
	Total	378	
HealthAmerica	Triangle	76 (prim. care)	6,300
	Triad	73 (prim. care)	8,900
	Charlotte	41 (prim. care)	1,300
	Greenville	28 (prim. care)	1,300
	Total	218 (prim. care) ²	17,800
Kaiser Permanente	Raleigh	4 (prim. care)	600
	Durham (March 1)	—	—
	Charlotte (July 1)	—	—
Pru-Care ³	Charlotte	55	—
Statewide Totals		1,930 ⁴	36,600

¹This figure includes both primary care doctors and specialists. It includes medical school physicians who treat patients but not those who only teach or only do research.

²Both HealthAmerica and Kaiser Permanente do not plan to sign up specialists at the present. Kaiser Permanente will contract with specialists as needed; HealthAmerica expects its primary care doctors to arrange for specialty care as needed.

³As of mid-December 1984, Pru-Care was still awaiting state approval, so had not enrolled anyone. The 55 doctors are members of the staff of the Nalle Clinic; only Nalle Clinic doctors will serve this HMO.

⁴The statewide total for doctors is artificially high, because many doctors in Charlotte, Winston-Salem, and Raleigh have signed up for more than one HMO.

Source: Telephone interviews by Robert Conn.

has always remained that somehow these savings might be explained by a self-selection of healthy people for membership in group practices."

Enthoven concluded the *New England Journal* editorial by emphasizing the practical implication of the Rand study: "The conclusion is now well established: the lower cost at GHC and others like it cannot be explained by differences in the population it treats."

The studies keep emerging, many of them focusing either on lower hospitalization rates or lower surgery rates — with both types addressing the overall issue of lower costs through HMOs. In Wisconsin last year, for instance, hospital admissions

under the standard health plans averaged 124 for every 1,000 members, compared to 80 for Madison-area HMOs, and 83 for Milwaukee-area HMOs.¹⁶

Sidney Wolfe, director of Public Citizen's Health Research Group, cites studies showing the number of operations performed is less under HMOs than under fee-for-service.¹⁷ One study showed fee-for-service patients had 1 1/2 times as many hernia operations, twice as many hysterectomies, gall bladder operations and appendectomies, and four times as many tonsillectomies.

Another cost-saving factor in all types of HMOs is prevention. Doctors try to head off illness through immunization, by promoting lifestyle

changes, and by catching a disease early when it is still inexpensive to treat. This means, in contrast to most standard health insurance plans, that physicals and immunizations are free. Hence, HMOs stress going to the doctor at the first sign of illness rather than waiting until you have to go. Preventing illness may mean fewer employee absences, a hidden benefit of HMOs. The test is in the success of prevention. Early detection of clogging arteries may help doctors head off heart attacks and strokes. Indeed, one major crippling stroke easily could cost more to treat than the annual physicals in an HMO with 1,000 members.

The American Medical Association's Council on Medical Services sums up the cost-saving issue: "HMOs appear able to provide care for their members at a lower total cost (premiums plus out-of-pocket) than most other health care delivery and financing systems."

Disadvantages of HMOs

Critics of HMOs include among their list of disadvantages the areas outlined below. Some often-stated disadvantages of HMOs are disappearing as laws and regulations change.

1. *HMOs save money by enrolling younger, healthier people* who don't need much care — a practice known as skimming the cream. People who already are sick are reluctant to change doctors in midstream. A switch to an HMO often requires a shift in doctors because the family doctor isn't affiliated with the HMO.

Large corporations who have studied the matter challenge the cream skimming thesis. Xerox Corp. officials now believe, according to *Business Insurance*, that those who have had illnesses or anticipate hospitalization are more likely to join HMOs.

HMO officials say they can do little to influence selection. Most employers offer the choice of HMO or traditional health insurance to every employee, regardless of whether they are sick.

While the Rand study found no difference between these groups, the *New England Journal of Medicine* editorial took both sides. "In some Medicare experiments, it appears that the beneficiaries who were more willing to change doctors and join a prepaid group practice were those who had not been sick recently," said the editorial. "On the other hand, if the fee-for-service insurance plan has sizable coinsurance or deductibles or poor coverage of office visits, patients with chronic conditions will be attracted to the comprehensive coverage offered by a prepaid group practice."

2. *HMOs fail to serve the elderly*, whose medical expenses are often highest. If this has



been true in the past, it is rapidly changing. Under the latest Medicare regulations — the so-called TEFRA Act, which is expected to take effect by year's end — Medicare recipients in areas where there are HMOs will get the chance to choose an HMO for medical care. This has the potential for opening up the large Medicare market to rapid penetration by HMOs or competitive medical plans. Margaret Heckler, former U.S. Secretary of Health and Human Services, predicts 600,000 Medicare recipients will sign up with HMOs in the next three to four years.¹⁸ Besides, some HMOs, such as HealthAmerica, already enroll Medicare members who have retired from a participating employer.

3. *HMOs fail to serve the poor and medically indigent.* Growing numbers of Medicaid recipients across the country are getting the chance to sign up with broad, community-based HMOs. All HMO members have access to the same care, whether their monthly fee is paid by an employer, Medicare, or Medicaid. (In the 1970s, some HMOs were made up predominantly of poor people, which meant services were not as comprehensive.) California has found that it costs 17 percent less to enroll low-income people in HMOs than it does to pay for care under its Medicaid program, MediCal. Furthermore, state officials say audits show the quality of care for low-income people is higher with HMOs than fee-for-service.

Barbara Matula, director of the N.C. Division of Medical Assistance, which oversees the Medicaid program, said, "We're ready to go once the HMOs are ready. We've had authority to buy in from the General Assembly, and approval from the [federal] Health Care Financing Administration to do it."

4. *Patients don't have much choice about what's done to them.* The primary care doctor, not the patient, often chooses the specialist. Sometimes, the HMO is so small that there's no choice at all, which means the HMO patient has little to say about which doctor operates on him or which specialist treats his most severe illnesses. "You often are not told what your options are," said Clark

Havighurst of Duke University. "The HMO doesn't hospitalize as often, and that means you may be deprived of hospital care without it being offered to you. The HMO does what it thinks is best."

5. *Doctors may stop treating patients when the money runs out.* There's no evidence that happens, according to a number of experts, who cite both the quality of care studies and the studies showing that malpractice suits occur at about the same rate among HMOs as they do in fee-for-service.¹⁹

6. *A number of HMOs have collapsed.* This threatens patients with loss of medical care despite having paid for it. Anthony Buividas, a consultant for Carolina Medical Care from the Ameri-

medicine. That charge has been leveled against HMOs from the beginning. But the argument probably is not nearly so strong in North Carolina as it is elsewhere, because most HMO members in North Carolina belong to IPAs. Consequently, doctors are treating their HMO patients alongside traditional fee-for-service patients. Even doctors belonging to group practice HMOs, such as PruCare, will continue to have fee-for-service patients.

The AMA's study found, "Some HMO members do express dissatisfaction with the perceived lack of personal physician-patient relations... However, members generally appear to find the system more acceptable as they become used to it and balance 'impersonality' against availability of technical ex-

THE LATEST WRINKLE IN HEALTH INSURANCE: PREFERRED PROVIDER ORGANIZATIONS

In a nutshell, preferred provider organizations — PPOs — agree to provide service to a specific pool of individuals, usually from an employer or group of employers, at a previously agreed fee. The individual can continue to go to doctors who don't participate in the PPO, but the plan usually pays a larger share of the bill if the patient goes to the PPO. The key is the discounted fees.

According to a report from the N.C. Medical Society, "This concept is attractive to the employers as a means of identifying cost-effective providers for their employees."

Three PPOs are in operation in North Carolina: the Triad Physicians Health Care Plan in Forsyth County, Health

Point Preferred in Forsyth County, and Med-Select of Guilford County.

There's a question whether preferred provider organizations can or should be regulated, because they are still based on fee-for-service. Some argue they are sufficiently like HMOs to be regulated like HMOs. Regulation of PPOs is currently being debated around the country. They are not regulated in North Carolina.

Source: "Alternative Delivery Systems in North Carolina: A Status Report," published in the *N.C. Medical Society Bulletin*, August 1984. This four-page report includes a glossary and a chart outlining the various components of four HMOs and three PPOs.

can Health Management and Consultant Corp., said most HMOs that failed have been poorly managed. They made inadequate projections of expenses on which to base premiums. Sometimes, they simply didn't achieve the membership projected, or fell short of the break-even point, he said. Recent changes in the model law, largely adopted in North Carolina, attempt to head off any questions of insolvency.

7. *HMOs are corporate practice of*

pertise and the HMO's perceived financial advantages."

But Havighurst is concerned that IPAs are too close to organized medicine, that often IPAs are formed under the auspices of the local medical society or by doctors who have been in medical society leadership. "Some of these plans were created to scare off other HMOs," he said. Currently, N.C. law does not speak to this issue explicitly.

What Policy Questions Are Ahead?

In the months ahead, the state is likely to see increasing competition among HMOs as they reach out to most employers in the state, as they seek a hand in treating the huge number of state employees, as they go after Medicare and Medicaid business. Furthermore, most HMO officials say the HMOs themselves do better when they compete, with increasing percentages of the population becoming involved with HMOs. One critical job of the state Department of Insurance is to make sure that competition is fair. But what does "fair competition" entail, as a practical matter, when it comes to state regulation, monitoring, and oversight? As the Department of Insurance begins coping with the HMO boom coming to the state, seven major policy questions will have to be addressed.

1. *What should the Insurance Department do to properly monitor HMOs?* HMOs are regulated by insurance departments in nearly every state.²⁰ The theory is that HMOs are like insurance companies because people buy care for a specified period of time. In some states, health officials also are involved, particularly in examining quality of care. In North Carolina, the Department of Human Resources was involved in monitoring HMOs under the original state HMO statute, passed in 1977.²¹ In 1979, the legislature placed this responsibility under the Insurance Department.

Today, the Insurance Department appears more prepared for the licensing function than for other responsibilities regarding HMOs. Gordon Church, general manager of HealthAmerica of North Carolina, found the Insurance Department staff members "very thorough" in their review of the firm's application for a license to operate in the state. The licensing process took from September 1983 until March of 1984, a period more extended than in Virginia, Louisiana, and Alabama where HealthAmerica applied at about the same time.²²

"In each case, the licensure process was less extended than it was here in North Carolina," Church said. But he added that the Nashville-based HealthAmerica was the first national organization to establish an HMO in this state.

Many analysts point out, however, that the key national problem is lack of adequate staffing in insurance departments trained to monitor HMOs, *once licensed*. People both in and out of state who had looked at the North Carolina law and the N.C. Department of Insurance repeatedly echoed that concern.

"The whole health end of the Insurance Department's staff need to be beefed up," said Jim Bernstein, president of the N.C. Foundation for

Alternative Health Programs. The department has been too laissez-faire in the past on health matters, he said. But now, with HMOs, the health end is "taking on such importance it needs a whole bunch of new people."

The new Insurance Commissioner needs to add first class staff both to the HMO side and the health insurance side, continued Bernstein. Staffers "don't know things they should know." For one thing, no one knows the people who have been carrying health insurance and drop it because of a rate increase. "I see a real problem in a rural state with people going bare or with so little insurance it is meaningless."

Under the law, the N.C. Insurance Department has to review quarterly financial statements by HMOs, approve rates and changes in benefits packages, and approve advertising. Erling Hansen, general counsel of the Group Health Association of America, the organization for Group Practice HMOs, said under present law, the N.C. Insurance Commissioner "does have sufficient authority to keep fly-by-night operations out of the state."

But he warned that as HMOs become successful in North Carolina, the state may see "an influx of less esteemed operators. It has happened around the country." Insurance Department staff members must be ready to cope with such HMOs, he said. Many states are "beefing up the quality and size of the HMO regulatory staff," added Hansen. In states like North Carolina, where HMOs are just beginning, understaffing is common.

The two really critical issues, as Hansen sees it, are the continuing financial solvency of the HMO and the protection of HMO members in the event of HMO failures so patients won't be billed for care they have not received.

Christina Bowesz of the federal office of HMOs said that many states have ineffective systems "to do the work that the statutes require." Oftentimes, state insurance examiners "don't know how to examine HMOs." Bowesz cited California, Illinois, New York, and Texas as states where HMO staffers are the best, and the most technically knowledgeable.

2. *Should states monitor quality of care in HMOs?* The question is explosive. To Hansen and other HMO defenders, the issue really boils down to equity — what does the state do to monitor quality in the fee-for-service sector of health care? "We should be regulated in an equivalent manner," said Hansen. "The industry believes that the quality of care in an HMO setting is equivalent to, if not better than, the fee-for-service sector."

The Institute of Medicine found no evidence that HMOs have provided a poorer quality of care than other components of the health care system, nor did

the Johns Hopkins or AMA studies.

Federally qualified HMOs are required to have a quality assurance program. A state might consider whether similar standards should be established for HMOs that are not federally qualified. However, this raises the interesting question: Would the quality assurance program apply only to the IPA patients of doctors who see both IPA patients and fee-for-service patients?

3. *Are major changes needed in the state HMO Act?* Few people think so. Wilson, who chaired the N.C. Commission on Prepaid Health Plans, said the N.C. law is better than the national model law, because it focuses on fiscal responsibility, on meaningful contracts ("so HMOs deliver what they say they will deliver") and on honest straightforward information on rates and benefits. The national model law attempts to mandate measurement of health status and "nobody knows how to do that."

"My preference is for a fairly flexible law," said Bernstein, "and a first class administration of the law by the Insurance Commissioner."

National experts agree that the N.C. law is a good one. Erling Hansen said the law is not only good for monitoring HMOs but also is "good from the consumer standpoint."

4. *Should there be minimum services required under state laws or regulations?* There are no minimum standards now under the state law — certainly nothing like the list of minimums required under federal law (see box on page 75). Virgil Marsh, manager of alternative delivery systems for the national Blue Cross and Blue Shield Association, pointed out one important twist to requiring minimum services. Many insurance departments have a political connection, he said. State regulators who insist that HMOs must cover a broad range of services may be doing so to make the

HMOs noncompetitive with traditional insurance plans. For instance, several states have recently attempted to require HMOs to cover prescription drugs, a step that could cause HMOs financial hardship. Then companies who support the commissioner could keep the bulk of the business. The issue is complicated, especially when linked with mandatory "dual choice" (see number 5 below).

5. *Should state law be amended to require "dual choice"?* Dual choice means that employers who offer health insurance must in addition offer HMOs, if the HMO asks to be offered. The federal HMO law already requires such choice (if 25 or more employees) — if the HMO meets the federal qualifications. Indeed, that's a major incentive for HMOs to become federally qualified.

But the issue is a tricky one, because of the lack of minimum services for state HMOs. Health-America's Church said that "dual choice may be helpful, if the state law is amended." If a new state law does not require dual choice, however, added Church, it must include a minimum benefits package, and that might make it tough to regulate.

Others argue strongly against dual choice, saying it removes the flexibility of HMOs to compete with traditional health insurance. A special industry advisory committee, for instance, recommended against the mandated approach.

The issue may be moot, anyway, since HMOs are reluctant to use the law to force an employer to give them access to employees. A business could bow to the law and permit the HMO to come in, while quietly sabotaging the HMO effort. "I used to think mandatory dual choice was important", said Wilson. "Now I wouldn't worry about it."

Instead, most HMOs seek federal qualification because it amounts to a federal seal of approval. But Hansen pointed out that some of the nation's best

RECOMMENDATIONS ON HMOs

1. Supervision of Health Maintenance Organizations should remain within the Department of Insurance. Staff should receive increased training to deal with the vastly increased business expected. A task force should be appointed to determine whether enough appropriate statistics are being kept and whether department staffers are being properly trained.

2. The state should negotiate with some or all HMOs to enroll Medicaid recipients.

3. The state should quickly move to offer HMOs to all state employees, perhaps using the equal pricing system.

4. Private employers should pay the same premium to each available health-care option — HMOs and traditional health plans.

HMOs — including the Group Health Cooperative of Puget Sound, the one studied by Rand — are not federally qualified.

6. *Should employers (or the government) pay an equal amount for each available health plan option—traditional health insurance, group practice HMO, or IPA—with employees picking up the difference?* According to the Rand research team, many employers are actually paying more for traditional health insurance than they would for HMOs. "If employers did pay an equal sum, price competition between HMOs and fee-for-service insurance plans could well increase."

In Wisconsin, the state decided on that approach for state employees, beginning in October 1983, and the percentage of state employees opting for HMO coverage jumped from 15 percent to 66 percent. In Dane County (Madison) this year, the state pays \$67.72 a month for individuals and \$169.34 for families for health care, whether an employee chooses an HMO or the traditional insurance plan. But health insurance costs \$76.33 a month for singles and \$188.16 for families, which means single employees must add \$8.61 a month and families pay \$18.82. All the HMOs are cheaper, and one asks for nothing from employees.

The new arrangement was not successful everywhere in Wisconsin, however. In Milwaukee County, most of the HMOs were more expensive than health insurance, and the majority of state employees stayed with the standard health insurance.²³

7. *Should the state Medicaid program provide HMOs as alternatives to traditional care?* The crux of the argument for HMOs is their effort to prevent illness, to find disease early, and to deliver a package of health care services efficiently. Traditionally, because poor people could not afford routine medical care, they waited to seek help until the problem was severe. That often meant visits to hospital emergency departments — one of the most expensive ways to get care — and long hospitalizations.

But states increasingly are using HMOs to try to hold down Medicaid costs while encouraging Medicaid recipients to get substantially better medical care. In Wisconsin, contracts have been signed with many HMOs to permit Medicaid patients to sign up. Enrollment is expected to reach 10,000 in Madison and 30,000 in Milwaukee by 1985. But Glenn Wilson points out that such an arrangement doesn't begin to deal with poor people who don't qualify for Medicaid. □

¹Figures based on telephone interviews by author; see the chart that details where these people are enrolled.

²From "HMO Status Report, 1982-83," published by Interstudy, the Minneapolis-based Health Policy Research Organization. These figures also are summarized in the Sept. 28, 1984, *American Medical News*, which also includes a useful map showing state-by-state percentages of the population enrolled in HMOs. Blue Cross and Blue Shield publishes similar figures, showing national enrollment in all HMOs of 12.4 million in June 1983, of which nearly 1.4 million were in Blue Cross HMOs. By June 1984, Blue Cross HMO enrollment was nearly 1.8 million; total HMO national figures weren't available. (See footnote 4 for more on resources available from Blue Cross and Blue Shield.)

³See the extended discussion of the Penn Group Health Plan in HealthAmerica's 1983 Annual Report, page 8.

⁴"Blue Cross and Blue Shield Plan Activity in Health Maintenance Organizations, 1984 Mid-Year Report," a publication of the National Marketing Division of Blue Cross and Blue Shield Association in Chicago, page 10, contains a wealth of information on HMOs run by Blue Cross and Blue Shield, including overall enrollment, summaries on numbers by type of HMO, top ten HMOs by enrollment, by growth, by sponsor, as well as detailed information on each Blue Cross HMO.

⁵From the sixth edition of "A Report to the Governor on State Regulation of Health Maintenance Organizations," prepared by Aspen Systems Corp. for the Bureau of Health Maintenance Organizations and Resources Development of the U.S. Department of Health and Human Resources, 1984, page 6. This report includes 12 major charts giving dozens of state-by-state comparisons, from whether a state requires consumer representatives on HMO boards to the size of required cash reserves to financial reporting requirements. It was prepared under the direction of Karen S. Greenwood, J.D., editor, HMO Law Manual.

⁶See the extended discussion of the history of HMOs in the "Kaiser Permanente Medical Care Program Annual Report 1983, a 50-year perspective on American Health Care," pages 7-24.

⁷See *Interim Report, Volume I* (1979) and *Final Report, Volume II* (1980), N.C. Commission on Prepaid Health Plans. The N.C. General Assembly created this commission in 1978 (see Chapter 1291 of the 1977 Session Laws, 2nd Session).

⁸See, for instance, the promotional literature published by PruCare.

⁹Deductible is what you have to pay before insurance pays anything. Under many plans, that may be \$100, or even \$500. Coinsurance is the portion of the bill you have to pay once beyond the deductible. Under many plans, insurance pays 80 percent of the doctor's bill, and you pay the other 20 percent.

¹⁰See the executive summary to "Health Maintenance Organizations," a 1980 report from the American

Medical Association's Council on Medical Service. The main 183-page report studies 15 HMOs (5 IPAs, 5 group practice models, and 5 staff models), looking at numerous measures of performance, including cost of care, quality of care, and accessibility of care. There is also the formal report to the AMA's House of Delegates.

¹¹From "The HMO Approach to Health Care" in the May 1982 issue of *Consumer Reports*, monthly magazine of the Consumers Union, which cites and details the 1980 Johns Hopkins study.

¹²From HMO promotional literature.

¹³See "HMOs, A Decade of Growth," *Business Insurance*, Dec. 19, 1983. Besides giving the figures from the automakers, the 10-page report says that employers find few gripes about HMO performance. The report also describes the various forms of HMOs, the advent of PPOs, and how the government has nurtured the growth of HMOs.

¹⁴"A Controlled Trial of the Effect of a Prepaid Group Practice on the Use of Services," by Willard G. Manning and five other members of the Health Sciences Program of the Rand Corp., *New England Journal of Medicine*, Vol. 310, No. 23, June 7, 1984, page 1505.

¹⁵The experiment was actually a bit more complex than that. From the report: "We compared four groups. The first three were samples of the Seattle area population who were not enrolled in GHC in 1976... Participants in the first two groups were assigned to plans that covered virtually all health services from fee-for-service physicians and ancillary personnel, such as speech therapists. In the first group, the services were provided at no cost to the participant; this plan is referred to as the 'free fee-for-service plan'." (Many N.C. employers now pay for health insurance for employees, and that insurance may cover virtually all cost — so this group is an important one.)

"In the second sample, participants had to share the costs of their medical care. They paid 25 percent or 95 percent of their medical bills, subject in most cases to a limit on out-of-pocket expenditure of up to \$1,000 per family (less for the poor)..."

"Participants in the third group, the GHC experimental group, received free services at GHC... The fourth group...was a random sample of GHC members in 1976 who otherwise met the eligibility requirements...and had been enrolled in the cooperative for at least one year."

Not surprisingly, once patients started paying for a hefty chunk of their bills, their admission rates dropped. Those paying 25 percent of their costs averaged 10 hospital admissions per year, though their bills averaged \$620 per year; those paying 95 percent of their costs averaged \$459 per year.

¹⁶"HMO Competition for Wisconsin's State Employees," by John Luehrs and Dale Hanson, *Business and Health*, September 1984, page 39.

¹⁷"Rating our Health Care Systems: You're better off with a health maintenance organization," by Dr. Sidney Wolfe in *Public Citizen*.

¹⁸See, for instance, the discussion on how new regulations open HMOs to Medicare beneficiaries in the Federation of American Hospitals Review, July/August 1984, page 9.

¹⁹The AMA analysis, for example, says, "'Under-utilization' has been suggested as a potential drawback of HMOs, resulting from their emphasis on cost-effectiveness. However, nothing in the literature indicates that HMO savings result from enrollees receiving less care than they need..."

²⁰Aspen Systems Corp. report, page 6, see footnote 5.

²¹See NCGS 57A (now repealed) and Session Laws, c. 580, s. 1 (1977).

²²HealthAmerica has introduced group practice model HMOs in these three states.

²³For a complete comparison of the five HMOs in Dane County and the five HMOs in Milwaukee County, see "HMO Competition for Wisconsin's State Employees," by John Luehrs and Dale Hanson, *Business and Health*, Sept. 1984, page 37ff. Only one HMO, Comp-Care, is in both counties. Luehrs is senior staff associate for health policy studies with the National Governors' Association, and Hanson is deputy secretary in the Department of Employee Trust Funds for Wisconsin.

CHAPTER IV Section III

URGENT CARE CENTERS: DOC-IN-A-BOX MEDICINE

by Robert Conn

On October 1, 1982, Charlotte's Mercy Hospital opened its Urgent Care Center in Pineville, about 10 miles from the main hospital near downtown Charlotte. That first month, 679 patients — about 22 a day — sought help for a variety of problems that really couldn't wait: sprains, strains, broken arms and legs, deep cuts, and sudden illnesses needing diagnosis and treatment.

By October 1984, the number of patients had nearly doubled — to 1,301. In December, the center hit a record of 1,464 patients, an average of nearly 50 patients a day.^{1,2} Additionally, Presbyterian Hospital's CarePlus near Matthews, which opened May 28, 1984, was averaging 38 patients a day by early spring, 1985.³

Both are examples of hospitals striving to keep their share of the health care dollar by getting into areas once thought to be exclusively the province of doctors. The two hospitals — and a handful of others in North Carolina — are competing directly with a new type of medical facility: doctor-run and chain-run urgent care centers. Some say the hospitals are competing with private physicians' offices as well.

All are referred to generically as ambulatory care centers, though most retain some sense of speed in their names, using words like "urgent," "minor emergency," "immediate," "first." Today, an estimated 2,300 ambulatory care centers operate nationwide.⁴

The concept of ambulatory care centers began about 1975, spurred largely by changes in lifestyle. Working people, especially those with children, found it difficult to get to a doctor during normal office hours. After hours, doctors were hard to reach.

The net result, recalls James Bernstein, president of the N.C. Foundation for Alternative Health Programs, Inc.: "If you got sick at night, you

would go to the emergency room [of the hospital]." The experience often was not satisfactory.

"Into this beautiful void, the urgi-center just walked right in," Bernstein said. "You just don't feel like going through the hassle of the emergency room."

Urgent care centers typically are open until at least 8 p.m., and often until 11 p.m., seven days a week, making them convenient for working parents. Usually they stress no appointments and very little waiting.

The number of centers is growing rapidly. By the spring of 1985, the Raleigh area had eight, the Greensboro area had five, the Charlotte area at least six, plus Mercy's Urgent Care Center and Presbyterian's CarePlus. In fact, almost every major North Carolina city has at least one. But according to Bernstein, who also heads the state's Rural Health Services Office, most small counties don't have any.

No one knows precisely how many there are. With no requirement for a state license or a state certificate of need, no one in Raleigh is keeping track of them. Insurance companies know them as doctor's offices rather than as facilities. But it is known that a number of additional urgent care centers are under construction and will open this year.

Why they evolved. Before the urgent care centers began appearing in the Carolinas about four years ago, people who needed a doctor after 5 p.m. usually had two choices — they could call a doctor at home or go to a hospital emergency department. The hospital emergency departments mushroomed. Presbyterian's department was seeing 52,000 cases a year in the early 1980s, compared with 30,615 in 1976.

Doctors and other health experts complained the emergency departments were being overused, that most people who went there were not "emergencies" at all.

A 1981 Charlotte Chamber of Commerce study found 58.6% of emergency room patients in Charlotte were non-emergencies who could have been treated in non-emergency facilities. The study showed that 68.9% of the patients had no private physician, but 65.1% were covered by private insurance.⁵ Furthermore, the overwhelming majority came in during normal business hours or in the evening.

The hospital emergency departments usually were not convenient and often involved waiting because doctors treated the critically ill and severely injured people first.

The realization that paying patients were going to crowded emergency rooms for non-emergency problems probably opened the door for urgent care centers.

But a parallel development was occurring. Private doctors were scaling back their long hours. House calls had virtually disappeared. Most had gone to a system of seeing patients by appointment. And solo practitioners were disappearing, replaced largely by partnerships or groups in which "on call" duty at night and on weekends was rotated, so the doctor you got after hours probably was not the doctor you knew at all. That practice may have made life easier for doctors, but it also helped snap the reliance on "my doctor" for help.

Into the breach came the neighborhood ambulatory care centers, offering speedy service with no appointments, with evening and weekend hours.

When a new center opens — especially the first one in town — it is often greeted with anger. Mercy's center drew outspoken opposition from a number of doctors while in the planning stages.⁶ When John Braun started what is now FirstCare in Chapel Hill, he recalls drawing opposition from both doctors and hospitals.

Description of Urgent Care Centers Today

Facilities. The centers vary considerably, from units that look like emergency departments to almost homelike settings.

In Raleigh, the waiting room of the Medico Urgent Care Center looks like a large living room, filled with upholstered chairs and couches, a fan swirling in the ceiling, green carpet on the floor. The building, with stained wood siding, resembles a comfortable small house. When Dr. Karen Atwood could stop to talk, she had just finished stitching up a cut in a middle-aged woman, while the patient's daughter read a magazine in the waiting room.

The waiting room of FirstCare Minor Emergency Medical Service on Chapel Hill Boulevard between Chapel Hill and Durham is sparse by comparison — plastic chairs, a drink machine. The center is in a dark-brick, multi-story office building

just off the busy boulevard connecting Durham with Chapel Hill. Inside, it looks like a typical doctor's office, with eight examining rooms around a support core. Dr. Daniel Harro had just finished putting a cast on an arm of a young lady when he found a moment to chat about that facility.

Both facilities are less sophisticated than the Mercy Urgent Care Center in Pineville. Because Mercy was building a new main-hospital emergency department at roughly the same time as its urgent care center, many rooms in the two facilities are identical, down to which clamps are in which drawers.

Both Mercy's Urgent Care Center and Presbyterian Hospital's CarePlus in Matthews are run more like emergency departments than many ambulatory care centers. In both, the group of board-certified emergency physicians that staffs the main emergency department also staffs the urgent care center.

Despite sophisticated life-support equipment that most have on standby, none of the N.C. urgent care centers wants to treat critically ill patients, and all instruct ambulance crews to take such patients directly to a hospital. The equipment is there in case a patient already being treated gets into trouble, or if a critically ill patient is brought in by car.

It happens, said Dr. Ed Wase, medical director of Presbyterian CarePlus and chief of emergency medicine at Presbyterian Hospital. He said doctors at CarePlus had delivered a baby, stabilized several heart attack victims before sending them on to the hospital and treated several victims of life-threatening anaphylactic shock.

Elsewhere in the country, however, so-called freestanding emergency facilities do welcome ambulances and true emergency patients. Many N.C. physicians believe such centers are risky, because there is no operating room or intensive care unit in the same building.

Physicians. The doctors who staff ambulatory care centers vary considerably, too. Many centers are staffed primarily with family physicians, doctors who have had a three-year residency that trains them to treat a broad range of medical problems.

Some, like Mecklenburg County's two hospital-run urgent care centers, are staffed by emergency physicians, doctors whose three-year residencies focus on treating emergencies.

Others are staffed with whatever physicians happen to be available, including internists; ear, nose, and throat specialists; pediatricians; and those with virtually every other specialty.

A few urgent care centers even use interns and residents — doctors who are still undergoing training and are moonlighting in urgent care centers. That practice draws criticism from doctors, especially for centers that use residents from distant hospitals outside the county.

Types of Care. The types of patient care vary, too. Some strictly offer episodic care — they take care of the current problem, but don't treat long-term or continuing problems. These centers send patients back to their regular doctors.

Some are really family practice centers with extended hours. These units want the bulk of their patients to keep coming back. They'll handle new patients primarily in the hope that they will become regulars.⁷ A family practice treats chronic problems, such as high blood pressure, heart disease, diabetes, and depression, as well as the typical complaints of urgent care clientele.

"We're not set up to handle that," said Raleigh's Atwood, because Medico stresses episodic care, and she doesn't have hospital privileges. Despite that, she said, 25-30 percent of the patients return to "see me specifically."

Some are in-between, taking on all comers, but providing continuing care for those who want it. These centers are particularly aimed at people who neither have a personal physician nor want one.

Doctor's Urgent Care Centres, headquartered in Fayetteville, also operate Doctor's Family Care. "Patients who have a long, ongoing illness, such as diabetes or high blood pressure, are seen in Doctor's Family Care," said Vicky Jones, director of personnel/operations. "It's an extra service we provide for people who don't have a family doctor."

Ownership varies too. Some are owned by local doctors or physician groups (such as Nalle Care Center in Charlotte and Physicians Immediate Care Center in Raleigh); some are mini-chains owned by doctors or local investors (AM-PM Minor Emergency Centers in Charlotte, Medico Urgent Care Clinic in Raleigh); some are statewide or regional chains (Doctor's Urgent Care Centres, with nine units, based in Fayetteville); and some are part of giant national companies, such as MedFirst, part of Humana, Inc.

The patients tend to fall into patterns. Atwood's description of typical patients was quite similar to the description of those at FirstCare by Harro, or those at Presbyterian CarePlus by Wase. The leading numbers are: flu and upper respiratory ailments, orthopedic problems, and physicals for employment, sports, and camp.

"You get a definite feel for what season it is," said Wase. Bronchitis, earaches, and sore throats mark winter; sprains, strains, and lacerations accompany summers.

Benefits of Urgent Care Centers

- **Extended hours.** Generally these centers are open at least 12 hours a day, seven days a week. Some are open 16 hours, 7-11. Few operate around the clock.

- **No appointment needed.** Some offer appointments for their continuing care patients, but all treat

drop-in patients swiftly. Waiting time usually is minimal. However, some will *not* treat patients who already have a doctor without consulting that doctor.

- **Convenience.** Urgent care centers are near home. In Charlotte, where most hospitals are clustered downtown, that means saving a 15-30 minute drive. In Atlanta, there is a ring of MedFirsts just off the beltway.

- **Access to care.** Many people don't have their own doctors, so urgent care centers provide a doctor when needed.

- **Inexpensive.** In general, urgent care centers are less expensive than hospital emergency departments. For new patients, they may be less expensive than private physicians who insist on a battery of tests on any new patient.

At the Medico Urgent Care Center in Raleigh, for instance, the flat fee is \$30 (including both doctor and facility). At FirstCare in Chapel Hill, administrator John Braun said, "We always have come out about half [the charge] of the hospitals" for the same type of problem. FirstCare also starts at \$30. "Our average cost per patient including lab and X-ray is about \$44," he said.

Doctor's Urgent Care starts at \$24, but that doesn't include X-ray or lab, said Jones. The minimum fee at Presbyterian CarePlus is around \$15, but few things qualify for that low rate. The fee for treating a sore throat would typically be \$28, said Wase. That contrasts with fees between \$45 and \$55 at the main hospital emergency department.

However, doctors caution consumers to be careful. Some centers take advantage of the "inexpensive" reputation to charge considerably more than others and sometimes more than hospital emergency departments.

Criticisms of Urgent Care Centers.

- **Episodic care.** Compared to the type of continuing care available from a personal physician, Urgent Care Centers may see a patient only once. Depending on whom you talk to, that's either a plus or a minus. It's the key to being able to quickly see patients, says Wase, who says those with personal physicians are sent back to their doctors for follow-up care.

Furthermore, said Mark Farmer, a Presbyterian Hospital vice president, "any patient that requires the services of a specialist is referred to a specialist."

Other ambulatory care centers are moving away from episodic care. Chapel Hill's FirstCare is one example. "When we first opened...we did maintain a philosophy of episodic medical care," said Braun. "You get your chronic care somewhere else. But patients don't behave that way. They continue to come back," he said. "So we feel we need to develop a primary care practice to offer more complete service

not only to the people who insist on using us but also to people who are looking for a family doctor.”

- *Changing physicians.* Often, there’s a different physician every time you visit. At others, though, the same doctor is on at the same time of day on most days, to increase the likelihood the patient could see the same doctor. Medico’s Atwood works that way.

Wase said the Presbyterian emergency physicians rotate through CarePlus and the hospital emergency department, generally spending at least two days at one place before rotating. But Wase said he was particularly concerned about ambulatory centers which use out-of-county doctors, especially those still in residency training. They’re not around, he said, if something goes wrong.

- *No assurance of quality care.* That criticism is often voiced, but for that matter, there is no assurance of quality care at any doctor’s office. One aid, said Wase, is to use only those doctors who are board certified. He advises consumers to ask that question before going to an ambulatory care center. “Somebody who is still in training can’t compare with someone who is board certified and taking continuing education,” he said.

Another possible assurance of high-quality care could be accreditation. Wase said both the American College of Emergency Physicians and the National Association of Freestanding Emergency Centers are working on such certification. A center that met quality standards would win accreditation, and keep it as long as it kept up quality. It would be a simple matter for consumers to look for a prominently displayed accreditation symbol issued by the Joint Commission on Accreditation of Hospitals.

- *No assurance of care after hours.* Though ambulatory care centers are open longer hours, many don’t offer help after hours. “Is there someone, 24 hours, who has access to the charts?” Wase asked. Most primary care practices, he said, have someone on call to “answer questions and give advice,” and to go to the office if necessary to consult a chart.

If an urgent care center patient has a reaction to a prescribed drug in the middle of the night, the patient faces the “delays and expense of starting from zero” at a hospital emergency department. Other urgent care centers have those arrangements. Records from Presbyterian’s CarePlus are sent at the end of each day to the main hospital emergency room, in case of emergency.

- *Impact on hospitals.* When ambulatory care centers first appeared, hospital administrators generally claimed they would have little impact on their emergency departments and that the primary impact would be on private doctors.

However, hospital emergency departments

have been hit hard.

“Unfortunately for emergency rooms across the country, we have been relieved of our bread and butter, the paying patient,” said Presbyterian’s Wase. “Emergency departments have been left with more indigent care, with patients who don’t look after their health.” Said a hospital consultant who asked not to be identified: “They make emergency rooms less profitable, by skimming off the reasonably good paying business.”

As a result, Presbyterian’s emergency room volume is “down significantly from the early 1980s,” Wase said. Furthermore, the patients are sicker. “Three years ago, we were admitting 8-9 percent” of the people who come to the emergency room, he said. Now 15-17 percent are being admitted.

That left hospitals wondering what to do, said Wase. “For years, emergency rooms were a loss leader. However, a significant number of admissions came in through the emergency department, so hospitals were willing to lose money on the emergency room to get patients into the beds upstairs.”

That, he said, is one primary reason why hospitals are establishing urgent care centers — “to provide a feeder. If patients go there, they will know the Presbyterian name and want to go to Presbyterian Hospital.”

Hospitals also are responding by cutting emergency room charges.

Policy considerations

- *Should urgent care centers be regulated?* Most experts agree that it would be almost impossible to regulate an urgent care center without also regulating private physicians’ offices, let alone separating them from rural health clinics, neighborhood medical clinics, and other similar programs to serve doctor-sparse areas or underprivileged central-city areas.

“I don’t think they can or should be regulated,” said Bernstein. “It would not be a good use of state money. Once you did that, it seems to me you would have to regulate all primary care — private doctors, community health centers. I don’t see how you could discriminate.”

Some states have, however, tried to regulate those centers that use “emergency” in their names.⁸

- *Should urgent care centers be required to have hospital affiliations?* For those centers with “emergency” in their names, Connecticut requires “immediate transfer arrangements with an acute care general hospital after the initial stabilization of the patients and have a backup radio system established with the local emergency medical system.”⁹

□

¹See "Urgent Care use exceeds predictions," in *The Stat Sheet*, Vol. 6, No. 5, March 7, 1985, a publication of the Public Relations Department of Mercy Hospital, Charlotte, N.C.

²The Urgent Care Center is part of a five-building Mercy Medical Park, and soon will be next to the site of Mercy Hospital South. It is an 8,500 square foot center, and includes laboratory and X-ray facilities as well as complete examining rooms.

³The 4,500-square-foot facility was built as part of the Medical Center of Matthews. It includes seven examining rooms, a cast room, a major trauma room, X-ray, and laboratory facilities.

⁴See "A meeting of disciplines: ACC Physicians Merge With Business Professionals," an account of the growing movement to chains and professional business management of urgent care centers, rather than physician owner-operators, in *Ambulatory Care*, the monthly publication of the National Association for Ambulatory Care, Vol. 5, No. 3, March 1985.

⁵The Chamber of Commerce report, called the "Emergency Room Utilization Study," was prepared by a task force of administrators representing Charlotte's three major hospitals, the executive director of the Mecklenburg County Medical Society, the administrator of a large group practice, a health planner and the head of the county ambulance service.

The study was prepared under the aegis of the chamber's Health Action Council, headed by a leading Charlotte doctor. One of the council's key goals was cost containment.

The study was launched after questions arose "whether costly facilities such as emergency rooms at hospitals are treating cases that might equally well be handled by available private and/or public physicians, thereby inflating costs of operating such facilities and creating an "artificial demand" for more such facilities."

The study period covered 7 days, Nov. 13-19, 1980, and included all 2,774 patients who showed up that week.

Among the surprising results:

- 45.6% of the emergency room patients were seen between 9 a.m. and 5 p.m., when doctors' offices are open. Another 36% came in between 5 p.m. and 1 a.m.

- Thursday, not the weekend, was the biggest day. Friday, Saturday and Sunday were close to Monday, Tuesday and Wednesday.

- Medical cases — those with illnesses — represented a surprising 61% of the cases, leaving 38.8% trauma (injuries).

- About 30% of all emergency room cases (63% of those with illnesses) could have safely waited more than 12 hours to see a doctor. By contrast, 41% needed either immediate treatment or treatment within two hours.

- The use rate by Medicaid patients was twice that of the general population.

There's a wealth of additional data in the study including cross tabulations and detailed data analyses.

⁶Dr. Dewey Dorsett, who emphasized he was speaking as a private physician, though he was then president of the Mecklenburg County Medical Society, said on October 6, 1981 that the planned urgent care facility was the result of "fuzzy thinking." He said it would encourage use of emergency rooms, which results in "patchwork medicine." He added the project would jeopardize a "first class medical center," the three central city hospitals. A Medical Society letter in the same period asked the hospital to reconsider because neighborhood medical care was the "historic responsibility of physicians."

⁷Dr. R. A. Salton of Charlotte headed a group of physicians that for two years operated the Humana MedFirst centers in Charlotte as family practice centers. Writing in the March-April 1985 issue of *Tar Heel Family Physician*, Salton describes his method of operation as a family practice model. "We only served our own patients, not those of fellow primary care physicians. We covered our practice after hours, admitted our patients to local hospitals and followed them into nursing homes.

"Using these principles, we saw our practice grow in two years from two doctors and 7,000 patients to eight doctors and 18,000 patients. This past summer, we informed Humana we would be progressing and would recruit for additional centers. We requested that they establish a family practice division that would include family practice marketing.

"Instead, Humana informed us they wished to start TV advertisements in Charlotte, which would have required us to see other doctors' patients as they marketed our services. This would have destroyed our standing in the medical community and even worse, would lower patient care standards in the long run. Our group decided not to renew our contracts." Instead, they moved to other locations for their family practice.

⁸In Ohio, for instance, freestanding emergency facilities (FEFs) are subject to certificate of need requirements. Ohio defines FEFs as "any facilities other than hospital-based emergency departments that accept patients from ambulance delivery on a regular basis, employ the word emergency or a derivative...in their name or title and accept or treat life- or limb threatening conditions," according to a report in the March, 1985 issue of *Ambulatory Care*, published by the National Association for Ambulatory Care. Urgent care centers are specifically excluded. In Connecticut, similar regulations are slated to take effect shortly. There, the definition is "any facility claiming to provide prompt emergency care" or use "emergency" in their names. Again, urgent care centers are excluded.

⁹See *Ambulatory Care*, Vol. 5, No. 3, p. 7.

CHAPTER IV
Section IV

DIAGNOSIS RELATED GROUPS AND CHANGES IN PHYSICIAN PRACTICE

by Robert Conn

A dramatic revolution in health care is occurring in America, but only the effect is being widely reported. The revolution is in the way American physicians practice medicine. The effect is hospitals in trouble. The change has come about as a result of a convergence of different pressures aimed to produce the same end — lower health care costs.

The pressures have come from the federal, state and local governments, from business, from labor, from insurance companies that discovered they could not retain customers with steadily escalating premiums, and from patients who found their out-of-pocket expenses for health care were becoming too large. The pressures have led to shorter hospital stays, more outpatient surgery, pre-admission testing, same-day surgical admissions, more home care, a willingness by doctors to question whether an operation is needed — all actions that critics of health care practice have been seeking for years.

The difference is that now it is actually happening — all over the country. The pressures have led, in short, to changes in the way doctors treat their patients. No longer is the doctor's approach so relaxed that he or she can routinely ask patients to go to the hospital the night before an operation "so I can answer your questions" or "so we can complete the tests you need before surgery." No longer is the doctor likely to permit patients to stay in the hospital an extra day for convenience of the family or until the patient feels completely well or for one more test.

The new standard is: can the patient get along at home during recuperation, perhaps with daily visits by a nurse or a therapist?

Insurance companies — and Medicare — increasingly are asking doctors why patients facing certain operations need hospitalization at all, when outpatient surgery is just as successful. The outpatient list is growing steadily, including such procedures as dilation and curettage, (commonly known as D&C), some types of hernias, removal of adenoids, and a host of others once considered to require hospitalization.

As a result of all these factors, hospital use is plummeting. Nearly all hospital administrators worry daily about maintaining occupancy or finding other ways to make money. Since hospitals are often among the largest employers in a community, and a focal point of community pride, the struggle is attracting the media spotlight. And states are taking steps to assist struggling hospitals.

In North Carolina, according to Glenn Wilson, an estimated 10,000 of 25,500 hospital beds are empty. Some of these beds already have been declared excess in the State Health Plan. In South Carolina, a new survey by the S.C. Hospital Association shows that 47% of the licensed hospital beds are empty.

The decline in hospital use has been sharp, according to Blue Cross and Blue Shield of North Carolina statistics. Between 1981 and 1984, patient days per 1,000 subscribers have dropped 22 percent, from 837 to 650, said Dr. Sandra B. Greene, senior director for Health Economics Research. (See glossary at page 3-5 for a definition of patient days.)

From 1982 to 1984, hospital days for Medicare eligible persons in the state dropped 22 percent, from

3,476 to 2,720, she said. Some of the decline has come from shortened hospital stays. Among Blue Cross subscribers, the average stay has dropped from 6.6 days to about 6.0 days. Among Medicare patients, it has dropped from 10.1 to 8.7 days. A major portion of the decline has come from fewer admissions, Greene said.

The experts agree that no single factor accounts for the sudden success in changing the habits of practicing physicians. Rather, many factors are involved.

Given the widespread publicity, it would be easy to conclude that the bulk of the credit should go to the federal Medicare program and its switch to payment by Diagnosis Related Groups (DRGs). But the drop began before DRGs started in October, 1983.

Perhaps more important in changing physician practices is the surge in pre-admission certification and pre-admission review programs. Some are run by insurance companies, while others are pushed by business-government-hospital-insurance-doctor coalitions, like the Mecklenburg County Health Care Cost Management Council. Preadmission review programs aim at limiting hospital admissions by steering some patients to outpatient treatment or testing, pushing same day admissions for most surgery patients, limiting lengths of stay, and assuring proper level of services (so a person who doesn't need intensive care any longer is moved to a regular room).

Thirteen of 16 private review programs listed in the Mecklenburg County Medical Society's *March Bulletin* have similar pre-admission review programs.¹ The only difference is that the council's criteria were prepared by 17 specialty and subspecialty committees of Charlotte doctors.

In addition, Blue Cross and Blue Shield of North Carolina now has 200 groups with 130,000 participants in its pre-admission certification program. James A. Brady, senior director for Blue Shield activities, predicts 500,000 persons will be enrolled in groups with pre-admission certification by the end of 1985. Already, substantial savings are piling up — at least \$545,000 last year as the program moved from a pilot project to a full-scale plan.

Another factor is the steady growth of Health Maintenance Organizations (HMOs), in which patients pay a set fee in advance for all their medical care. That means the doctor who reduces unnecessary hospitalization will have more left over for himself or herself. In one type of HMO, Independent Practice Associations, pre-paid patients are treated side-by-side with traditional patients, boosting the likelihood of a spillover effect to those patients. (See Section 2 of this chapter for more on HMOs).

All these programs are aimed at cutting hospital stays. All have the same effect — forcing

doctors to reevaluate how they have been treating their patients, and though the changes start just with patients affected by the new programs, they eventually spread to all patients.

"It's hard to practice one way for one group of patients and another way for another," said Brown Gardner, director of Medicare Reimbursement for Blue Cross and Blue Shield of North Carolina. (Under a contract with the federal Health Care Financing Administration, Blue Cross and Blue Shield of North Carolina is the Medicare intermediary in this state, paying all Medicare claims to hospitals.)

However, there appears to be a critical point. "It appears that doctors will modify their patterns for individual patients when those patients are a very small percentage of their practice," said Brady. "As they become a greater proportion — 20-30 percent — the doctor then has a tendency to begin to treat all of his patients the same way."

Take cataracts. Many pre-admission review programs will still approve hospitalization. But Medicare administrators decided that these could be done almost exclusively on outpatients. Since doctors had difficulty justifying hospitalization for those under 65 if their elderly patients had the operation as outpatients, virtually all cataracts procedures are now done outpatient. The same thing could happen with virtually any standard adopted by a pre-admission program, if a substantial percentage of the doctor's patients were included.

The New Standards — An Example of How They Develop.

By and large, the standards or criteria for admission, length of stay, level of care (intensive, inpatient, outpatient, office), and whether or not to operate are not simply plucked out of the air by anonymous bureaucrats. Rather they are developed by doctors — indeed by the specialists in that particular field.

For instance, the Clinical Criteria and Operations Manual of the PreAdmission Review Program (PAR) of the Mecklenburg County Health Care Cost Management Council was prepared largely by doctors. It's a thick blue looseleaf notebook, with each page containing a different diagnosis.²

In an introductory letter, Dr. John W. Foust wrote, "The clinical criteria have been developed by local physician panels — specialists working in their own area of expertise — to represent 'Best Charlotte Medicine.' The criteria are a goal for the provision of high quality, cost-effective care, and do not represent standards of care."³

Best Charlotte Medicine is the code phrase developed by the PAR program to indicate that some individual physicians or physician groups in Charlotte already were following that plan to treat

their patients with that particular diagnosis.

The medical section lists pre-admission criteria for when a patient should be hospitalized, whether intensive care is needed, and the length of the evaluation period — typically two days, but up to seven days for a heart attack. In most instances, after two hospital days, the doctor has to spell out exactly what he proposes to do and how long it will take to win certification for additional hospital days.⁴

The surgical section first deals with whether the surgery is necessary, (often including screening guidelines or evaluation suggestions), whether the operation is inpatient, outpatient, or office, and if inpatient, how many days will be required in the hospital.⁵

The guidelines were developed after doctors observed widespread variations in treatment at Charlotte hospitals and among the groups who worked at Charlotte hospitals. Hospitalization rates also differed substantially.

The PAR program works, too. According to Executive Director George Stiles, hospitalization rates for employees of First Union National Bank in Charlotte dropped in just one year from 535 to 390 days per 1,000 persons. After just six months in the program, the savings for Mecklenburg County employees were so impressive that after years of annual insurance increases ranging from 19-32%, Aetna Life and Casualty decided there would be *no* increase in 1985.

Physician Practice Variation

Until just a few years ago, doctors didn't even believe there was such a thing as physician practice variations. If you asked them, they would explain that they were tailoring their care to the individual patients, and that "everybody" did it the same way.

If asked to justify that stand, many would cite the fact that several medical schools were represented in their residency program, and they were all trained about the same way.

Then came Dr. John E. Wennberg, now Professor of Community and Family Medicine at Dartmouth Medical School in Hanover, N.H. Since he published his first report in *Science* in 1973, "Small Area Variations in Health Care Delivery,"⁶ Wennberg has been document-

ing that, indeed, doctors do vary in the way they treat patients.

In that initial article, he looked at variations in medical practice in Vermont, a state so small that it could be divided into 13 geographically distinct hospital service areas.

"Since the medical care in each area is delivered predominantly by local physicians, variations tend to reflect differences in the way particular individuals and groups practice medicine," Wennberg wrote in that article.

Based on 1969 data, he found big variations in the broad parameters. For instance, hospital days per 1,000 persons per year varied from 1,015 in the lowest area to 1,495 in the highest area, hospital discharge rates from 122 to 197 per 1,000 persons per year, and average hospital expenditures per person per year from \$58 to \$120.

He peeled back layers of the onion and found big differences among the 13 locales included in the study. "Tonsillectomy provides an example of variability," he wrote in the *Science* article. "Assuming that age-specific rates remain stable, there is a 19 percent probability that a child living in Vermont will have his tonsils removed by age 20. The probability recorded in the highest service area is over 66 percent, as contrasted with probabilities ranging from 16 percent to 22 percent in the neighboring communities, which are ostensibly similar in demographic characteristics."

Take a look at a chart showing certain selected surgical procedures performed per 10,000 persons for the 13 Vermont hospital service areas, taken from that *Science* report:

VERMONT VARIATIONS

Selected Surgical Procedures Per 10,000 Persons in 13 Hospital Service Areas

Surgical Procedure	Lowest two areas		Entire state	Highest two areas	
Tonsillectomy	13	32	43	85	151
Appendectomy	10	15	18	27	32
Hemorrhoidectomy	2	4	6	9	10
MALES					
Hemiorplasty	29	38	41	47	48
Prostatectomy	11	13	20	28	38
FEMALES					
Cholecystectomy	17	19	27	46	57
Hysterectomy	20	22	30	34	60
Mastectomy	12	14	18	28	33
Dilation & Curretage	30	42	55	108	141
Varicose veins	6	7	12	24	28

Over the years since that initial paper, Wennberg has turned out a substantial number of additional reports, many of which are considered landmarks in the study of physician practice variations.

For instance, with John Bunker of Stanford University School of Medicine and Benjamin Barnes of Harvard Medical School, Wennberg looked at nine common operations: hysterectomy for sterilization, tonsillectomy for enlarged tonsils, repair of inguinal hernia, cholecystectomy for silent gallstones, extraction of the lens for cataract, Caesarian section, appendectomy, prostatectomy for enlarged prostate, and hemorrhoidectomy.⁷

Wennberg's studies are broader than Vermont. He documents similar variations in New England⁸, in Iowa⁹ and around the world.¹⁰

Then last summer, Wennberg reached center stage, when a fresh report "Dealing with Medical Practice Variations, a Call for Action," became the centerpiece of the Summer 1984 issue of *Health Affairs*, with the entire issue devoted to debating such variations and their implications.

In the report, Wennberg outlines three key steps:

1. *Monitor performance in hospital markets.*

Wennberg says the necessary data is already available in Medicare, Medicaid, and Blue Shield systems, and explains how to develop the statistics. "Under the feedback strategy I suggest, tables such as these should be generated by third-party carriers for all commonly used diagnostic and therapeutic procedures," he said, and passed on to physicians.

2. *Deal with the effectiveness problem.*

Often, he indicated, once physicians become aware of variations that are not easy to explain away, they study the situation, and the high rate areas disappear. For instance, in the Vermont community that produced the highest numbers of tonsillectomies in the table on page 91, the doctors in the town studied the literature, evaluated the standards that they used to decide when the procedure was necessary, and *decided among themselves that the procedure should be used only after a second opinion*. "In subsequent years, the rate for tonsillectomy dropped to less than 10 percent of the rate as first measured," Wennberg said. "This important example of physician-initiated response to information occurred without economic sanctions and was motivated primarily by concern that local practice should conform to state-of-the-art criteria for recommending tonsillectomy."

In Maine, the strategy is for the Maine Medical Association to convene doctors from low- and high-rate areas for a particular operation to discuss the differences. For instance, on prostatectomies, doctors concluded that these patients actually were better treated by more conservative methods.

3. *Deal with the cost containment problem.*

"Many hospitalized patients can be effectively and safely treated in the ambulatory setting; the problem is knowing who they are," Wennberg says.

Widespread variations exist in North Carolina, too. Take whether doctors ordinarily perform operations in the hospital or as outpatient surgery. Just look at Section 1 of this chapter on ambulatory surgery for an indication of the wide variations in *North Carolina cities* in terms of outpatient surgery; the differences are astonishing when one considers that the population of the state is relatively homogeneous.¹¹ (See pages 63-68 and 70.)

DRGs and How They Work

The new prospective payment system for Medicare began in October 1983 when the first hospitals switched from the old retrospective cost-based reimbursement system. Under the system, all diseases are classified into 468 categories or disease groups. Each has a relative weight compared to all the other DRGs, and each has a geometric mean length of stay in the hospital.¹²

Using a formula that takes into account such factors as labor and locale, a fixed fee is calculated for each DRG for each hospital (see sidebar on DRGs). Hospitals that can treat patients for less than the DRG rate — either by operating efficiencies or by cutting the length of stay — may make a profit on Medicare patients. Hospitals that cannot treat patients for less stand to lose money.

In North Carolina, the bulk of the hospitals say they actually fare better under DRGs than under the old reimbursement program. Brown Gardner, director of Medicare Reimbursement for Blue Cross/Blue Shield of North Carolina, said "institutional providers" — mostly hospitals — took in \$888 million from Medicare in 1984, a 22 percent increase from the \$727 million in 1983. Even if 5.3 percent to 8.3 percent of that increase is caused by inflation, and another 4 percent from more claims under Medicare during 1984, that still means 10-13 percent of the increase is directly attributable to hospitals getting more for Medicare under DRGs, says Gardner.

Gardner says the advantage of the new system for hospitals is that they are rewarded for efficiency, their paperwork is reduced, their income becomes predictable, and administrative complexities are reduced. For beneficiaries, the quality of care is maintained, there is no additional billing by the hospital, and the hospital has an incentive to control costs. However, the question of quality of care is being debated. The General Accounting Office alleged earlier this year that patients in some hospitals have

DRGs - HOW MEDICARE PAYS FOR HOSPITAL CARE

by Robert Conn

Overview

On October 1, 1983, the way in which the federal government pays for Medicare in-hospital services changed dramatically. Until that time, the amount of the payment for Medicare patients was not determined until all the hospital services had been provided and the *costs* of providing those services had been determined. Then — retrospectively — the hospital would tell Medicare how much the services cost and learn how much of the bill Medicare would pay.

Beginning with the new 1984 fiscal year on October 1, 1983, the federal government began to try to get control of rising costs in the Medicare program by changing its payment system so that a hospital would know at the beginning of treatment how much the program would pay for inpatient hospital care. This new Prospective Payment System (PPS) was designed so that hospitals will be paid on the basis of pre-determined — or prospectively determined — rates for the operating costs of inpatient services. The PPS pays an amount that has been calculated by multiplying a weighting factor assigned to a particular Diagnosis Related Group (DRG) by an amount called the appropriate federal rate. DRG is a classification approach using major medical diagnostic categories.

The Prospective Payment System thus changes from a payment amount determined retrospectively and individualized to every hospital in the U.S. to one payment amount per diagnosis determined in advance and applicable to every hospital in the U. S. after a four-year phase-in period.

The amount of Medicare payment is determined by the results of several calculations which begin with a standardized rate of payment for the nation and each region — one rate for urban areas and another for rural areas. There is a transition period to try to ease the shock of the change to hospitals. During this transition period, each hospital is allowed to continue to receive payment based partly on its own historical costs by blending its individual rate portion with a

federal rate portion. This federal portion is itself a blend of a regional rate with a national rate. Regional and national rates allow labor cost variations in the various areas of the country to be taken into account in paying hospitals for Medicare services. Hospitals are very labor-intensive industries, so the variations in labor costs can be significant to the financial well-being of the facility.

In the calculation of final DRG-based payment during Year One of the transition period (FYE 9/30/84), the appropriate blended rate is the product of the individual hospital rate portion and the regional rate portion. In Years Two and Three, the appropriate blended rate is a blend of the individual hospital rate portion, the regional rate portion, and the national rate portion. In Year Four, only the national rate is used with no blending of regional or individual hospital portions.

The appropriate federal rate, the beginning amount for DRG-based calculations, is an averaged, standardized payment amount per Medicare discharge, i.e., the average of the cost of all Medicare inpatient charges.

This beginning amount is then modified up or down by the federal Health Care Financing Administration's (HCFA) estimation of how much of the hospital's resources go into the treatment of that particular diagnosis. An amount decided by HCFA is assigned as the relative weight (or weighting factor) of each of 468 diagnosis related groups. The relative weight is multiplied by the averaged standardized amount (blended rate) to arrive at the final Medicare payment amount. Thus the beginning amount (federal rate) is modified depending on the diagnosis and treatment of the illness and the location of the hospital. This modification takes place in a number of steps and depends on a number of factors. These elements will be described in the next section, "the Components of the Calculation." Then the last section will give a sample calculation of the final Medicare payment

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been discharged prematurely on the pretext that their Medicare coverage had run out, and that "patients are being discharged from hospitals after shorter lengths of stay and in a poorer state of health."¹³ Dr. James Sammons, executive vice president of the American Medical Association, agrees: "We're sending patients home too quick too sick."¹⁴ He notes the evidence is from early data and anecdotal reports.

But Dr. Barbara Kramer, former chief of the N.C. State Health Planning Section, said the DRG program is "too new" to make generalizations. Andrea Mann of the American Hospital Association said "There is no real evidence of quality of care suffering...no good numbers." Both indicated the evidence is strictly anecdotal. Many hospital experts are calling for close studies of deaths among Medicare patients to be sure they didn't die because they were forced out of the hospital too soon.

But DRGs have a corollary impact. DRGs force doctors to pay attention to length of stay for elderly patients. But that usually means doctors are going to watch length of stay for *all* patients. That means changes in medical practice, as doctors find it logically difficult to keep a younger patient in the hospital longer than an elderly patient. Unlike DRGs, though, when doctors send insurance-covered patients home more quickly, the hospital simply takes in less money.

Retrospective Review: Another Pressure on Hospitals.

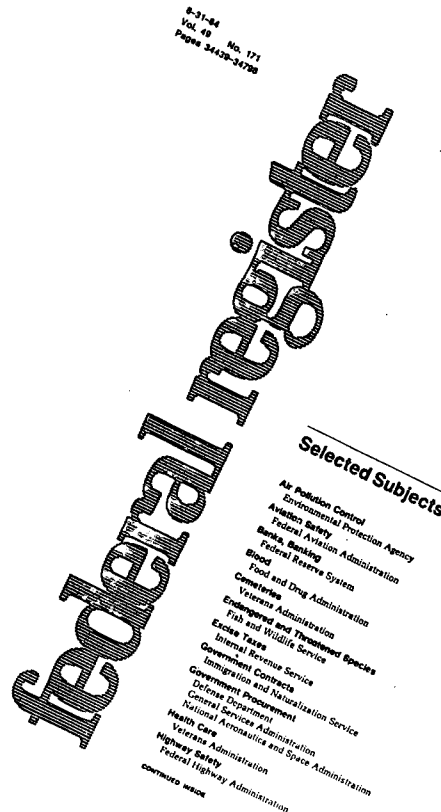
Many of the new cost containment programs also question the judgment of doctors. Medicare has retrospective review, in which the *hospital* may not get paid if the *doctor* admits a patient unnecessarily, or performs the wrong treatment. Seven of the 16 private review programs in Mecklenburg County have this retrospective review also.

Dan Carrigan is director of the Metrolina Medical Foundation, a professional review organization (PRO) that contracts with Medical Review of North Carolina, the state PRO for Medicare reviews, and with business on 140,000 industry-insured lives — employees and dependents in five states. Carrigan explained that Metrolina Medical Foundation, under these contracts, looks for a variety of unnecessary expenditures. Under the new Medicare retrospective review program, he said, professional review organizations are turning "around the presumption and presume it isn't in order unless it is clinically justified."

Certain kinds of procedures — such as removal of the gallbladder — require pre-admission approval, Carrigan said, but more than 95 percent of the cases are retrospective. Reviews don't begin until

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*The revised DRGs for 1985
were contained in this
August 31, 1984 issue of
the Federal Register.*



—continued from page 93

based on diagnosis related groups or DRGs. The details are from Brown Gardner, Director of Medical Reimbursement of Blue Cross and Blue

Shield of North Carolina and *Description and Analysis of Medicare Prospective Price Setting Including Changes for Year Two* by the Healthcare Financial Management Association.

The Components of the Calculation

1. Adjusted Standardized Amount Per Medicare Discharge.

Each calculation begins with an adjusted standardized amount per Medicare discharge, a national or regional average amount which HCFA computed based on hospital cost performance all across the country in 1981, the base year for the computation. This adjusted standardized amount is split into 18 regional standardized rates — one rural and one urban for each of nine census areas — and two national standardized rates — one rural and one urban.

The national standardized rate applies to the entire nation. Both the regional standardized rates and the national standardized rates are used in computing final payments for Medicare under the prospective payment system based on DRGs. The regional standardized rate (or regional rate) and the national standardized rate (or national rate) combine to form the federal rate.

2. Regional Standardized Rate

North Carolina is part of the South Atlantic region and there are two standardized rates for the region. The urban rate for the fiscal year ending September 30, 1985 for the South Atlantic region is \$2,909.23; the rural rate is \$2,316.89. Each standardized rate has a labor portion and a nonlabor portion.

Table 1: The Regional Standardized Rates for the South Atlantic region for 1984-1985 are composed this way:

	Labor Component	Nonlabor Component	Total
Urban	2,296.98	612.25	2,909.23
Rural	1,889.46	427.43	2,316.89

Labor factors that are specific to rural and urban areas of North Carolina modify the labor component of the regional rate. The labor factor used is determined by the hospital's location in North Carolina and takes into account variations in local labor costs. There are two steps in this modification:

Step 1

Urban (or Rural)	Labor	Adjusted Labor
Labor Component x	Factor	= Component

Step 2

Adjusted Labor	Nonlabor	Wage Adjusted Federal
Component +	Component =	DRG Rate for the Region

—continued next page

Here are those labor factor variations and resulting Wage Adjusted Federal DRG Rates for North Carolina.

Table 2: North Carolina Labor Factors and Adjusted Federal DRG Rates, FY 1985

Location of Hospital	Labor Factor	Adjusted Federal DRG Rate
Rural North Carolina	.8487	\$ 2,045.11
Urban North Carolina		
Asheville	.9503	2,813.73
Burlington	.8463	2,574.23
Charlotte MSA	.9756	2,872.00
Fayetteville	.9311	2,769.59
Greensboro MSA	.9558	2,826.40
Hickory	.9484	2,809.36
Jacksonville	.8800	2,651.84
Raleigh MSA	1.0118	2,955.36
Wilmington	.8996	2,696.88

Note: MSA is the abbreviation for Metropolitan Statistical Area, the Census Bureau's geographical unit to describe urban areas. The Charlotte MSA now includes Cabarrus/Rowan, which started off in a separate MSA.

3. National Standardized Rate

The regional rate combines with the national rate to form the federal rate portion of the final payment for Medicare treatment. In the first year of DRG-based Medicare payments, the national rate was not used in the calculation. Beginning with Year Two (October 1, 1984), the national rate has been used in an increasing amount each federal fiscal year. As of October 1, 1986 (the beginning of Year Four), the national rate will be the only appropriate federal rate which will then be modified by the DRG relative weight assigned to each of the 468 DRGs. Table 3 illustrates the blend of the hospital's own historical costs (hospital specific portion) with the federal portion of the rate — Medicare's effort to standardize and predict Medicare payments. The federal portion is itself a blend of the regional rate and the national rate.

Table 3: Relative Proportions of Components of Beginning Amount For Payment Under Medicare: Hospital Specific and Federal Portions Including Regional and National Rates, FY 1984 - 1987

Column	1	2	3	4	5	6
Fiscal Year Ending Septem- ber 30	Regional Rate	Federal Portion National Rate	Total	Percentage of Federal Portion Used	Percentage of Hospital Specific Portion Used	Adjusted Beginning Amount for Payment Under Medicare
1984	100%	0	100%	25%	75%	100%
1985	75%	25%	100%	50%	50%	100%
1986	50%	50%	100%	75%	25%	100%
1987	0	100%	100%	100%	0	100%

Column 1 + Column 2 = Column 3

Column 4 + Column 5 = Column 6

—continued next page

4. DRG Relative Weights

The federal Health Care Financing Administration (HCFA) classifies each Medicare patient according to one category of diagnoses — one of 468 Diagnosis Related Groups (DRGs). HCFA has assigned to each DRG a relative weighting factor that adjusts the beginning amount for payment under Medicare up or down to account for the estimated relative cost of hospital resources consumed to treat the individual patient when compared to other DRGs. A listing of the DRGs and their relative weighting factors is included in this report as Appendix C. Since DRG relative weights range from 0.1823 for DRG 382, False Labor, to 6.7815 for DRG 104, Cardiac Valve Procedure with Pump and With Cardiac Catheterization, it is readily apparent that a proper diagnosis is critical to hospital financial planning. To illustrate the variation in final payment that can result because of DRG classification, calculate the final payment for the two DRGs listed above. Assume that the beginning payment amount is \$2,000. Final payment after multiplication of the \$2,000 by the relative weighting factor for DRG 382 is \$364.60; for DRG 104 final payment is \$13,563.00.

Sample Calculation

Let's calculate a specific final payment under the DRG-based prospective payment system for implanting a permanent cardiac pacemaker in a patient who has had a heart attack, DRG 115, in a rural hospital in North Carolina. Compared to the other DRGs, this has a relative weighting factor of 3.8743.

Let's say the hospital specific rate (HSR) is \$1,657.44 per discharge.

Now let's calculate the federal rate for rural North Carolina:

First, from Table 1, the rural labor rate for the South Atlantic is \$1,889.46 and the nonlabor rate is \$427.43. The total is \$2,316.89.

Second, from Table 2, we see the labor multiplier is .8487 for rural North Carolina.

Third, from Table 3, we see that the federal rate for FYE 1985 is going to be 75% from the region, and 25% from the national rate, and that that combination is going to make up half of the blended rate. This is the blend for the second transition year for PPS.

So the labor portion from the region,	\$ 1,889.46
is multiplied by the rural labor multiplier,	x .8487
	= \$ 1,603.59

Add unchanged nonlabor portion	+ 427.43
That makes a <i>regional rate</i> of:	\$ 2,031.02

Meanwhile, the national rate of \$2,381.39 breaks down into a labor portion of \$1,943.21 and a nonlabor portion of \$438.18. Once again we have to use the rural multiplier.

So the labor portion of the national rate	\$ 1,943.21
is multiplied by the state's rural labor multiplier	x .8487
	= \$ 1,649.21

Add unchanged nonlabor portion	+ 438.18
That gives an <i>adjusted national rate</i> of:	\$ 2,087.39

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long after the patient has left the hospital.

The agency is looking at a variety of questionable practices, everything from unnecessary surgery, to operations that could have been done as outpatient procedures, to readmissions.

Between August and December 1, 1984, the

agency examined 3,088 cases and referred 871 to the medical director for further evaluation. The medical director found 644 to be questionable. Carrigan said 192 of those cases were reconsidered. As of April 1985, 106 were upheld and the other 84 are still pending final decisions.

Now we have to blend the *regional* and *national* rates to get a *federal rate*. For this year, this is 75 percent regional and 25 percent national.

So the regional rate	\$ 2,031.02
is multiplied by the regional portion of the federal rate	x .75
to get:	\$ 1,523.27
And the national rate	\$ 2,087.39
is multiplied by the national portion of the federal rate	x .25
to get:	+ 521.85
Which gives us a <i>federal rate</i> of:	\$ 2,045.12

Because the final adjusted rate is comprised of 50% federal rate portion and 50% hospital specific rate portion this year, it is necessary to multiply both the hospital rate and the federal rate by .50 to get the blended rate.

Hospital specific rate	\$ 1,657.44
is multiplied by	x .50
to get:	\$ 828.72
Federal rate	\$ 2,045.12
is multiplied by	x .50
to get:	1,022.56
which yields a final blended rate of:	\$ 1,851.28
which is multiplied by the relative weight for DRG 115 of:	x 3.8743
which means the hospital receives:	\$ 7,172.42

If the hospital can treat the patient for this illness for less than \$7,172.42, the hospital pockets the difference. If, on the other hand, it costs the hospital more than \$7,172.42, the hospital absorbs the difference. The hospital cannot bill the patient for the difference beyond what the patient pays for the co-payments and deductibles required under the Medicare system.

Notice what happens when we take a simple procedure, say a vasectomy. The multiplier is .2655:

Blended rate	\$1,851.28
Multiplier	x .2655
Final Medicare Payment =	\$ 491.51

It's immediately apparent that the hospital can't afford to spend very much on this patient. Of course, a vasectomy is normally done as outpatient surgery.

Or take vaginal delivery of a baby without complications, DRG .4063. That produces a payment of \$752.17. This does not allow for many days in the hospital. (Why under Medicare at all? Because certain disabled people qualify for Medicare.)

It is important to note that DRGs are for the hospital portion of Medicare. Doctors' fees are separate. See Appendix C, page 229, for a listing of all 468 Diagnosis Related Groups.

Now, Carrigan said, hospitals are operating under a plan that presumes up to 2.5 percent of admissions or days in the hospital by Medicare patients are unneeded. If the actual experience stays below 2.5 percent, no Medicare payments will be denied. But if the agency calculates that more than 2.5 percent of a hospital's medicare admissions or days of care are questionable within a quarter-year, then the hospital may lose that presumption.

If it does, and the agency disallows an admission, or says the patient had unneeded surgery, or stayed in the hospital too long, the hospital may be left holding the bill for a patient who was treated and long since discharged. Under the rules, the hospital also can't bill the patient.

The performance level for hospitals doesn't look good so far. In the first quarter of 1985, 63 hospitals in the state lost their presumption. They now risk having Medicare refuse to pay for bills of patients already treated. In the second quarter, Carrigan said, additional hospitals were being added.

□

¹The 16 include:

- PAR, a program of the Mecklenburg County Health Care Cost Management Council, which includes six businesses or organizations;
- CURB, a program of South Carolina Blue Cross and Blue Shield;
- Metrolina Medical Foundation, covering six firms;
- Medicare Pilot Life, eight firms;
- Gulf Group Services, one firm;
- PACRS Prudential, four firms;
- CallCARE, one firm;
- INTRACORP CIGNA, one firm;
- BEECH STREET HealthMAP, one firm;
- Quickadmit, one firm;
- Lincoln National, two firms;
- Teledyne Plus Plan, one firm;
- Peer Review Systems, one firm;
- PAR-Equitable, two firms;
- Review Plus, one firm; and
- American Heritage, one firm.

Most of these programs also have concurrent review processes (to be sure patients get moved from intensive care to regular care) and assigned lengths of stay.

²The manual can be seen at the offices of the council in the Doctors Building, 1012 Kings Drive, Charlotte, NC 28283. The director of the PAR Program is Kathy Winters. The phone number is 704-334-7656.

³Foust was president of the Mecklenburg County Medical Society and a vice president of the N.C. Medical Society when he organized the first meetings of a coalition that was to lead to the Mecklenburg County Health Care Cost Management Council in 1981. He had had a longstanding interest, though, in monitoring physicians, having served as chairman of

the old Blue Shield committee of the state society in the late 1970s.

⁴Take gastroenteritis. Indications for hospitalization are —

A. Intractable vomiting and/or diarrhea, dehydration with shock, electrolyte imbalance, blood in stools.

B. Persistent fever above 101 degrees F° for more than 24 hours.

C. Need for parenteral (intravenous) therapy. PAR allows two hospital days for evaluation. After that, the doctor has to show what he or she plans to do and how many days it will take.

⁵Take removal of hemorrhoids. Indications for surgery include anal bleeding, anal pain, anal protrusion, and hemorrhoidal thrombosis or edema. The page lists techniques for evaluation. It implicitly suggests trying banding and nonoperative therapy first (and notes banding is an office or outpatient procedure). Normal length of stay: 4 days.

⁶With Alan Gittelsohn, in *Science*, December 14, 1973, Volume 182, pp. 1102-1108.

⁷"The Need for Assessing the Outcome of Common Medical Practices," *Ann. Rev. Public Health*, 1:277-95, 1980.

On hysterectomy, he says, "Hysterectomy goes without challenge when performed for cancer of the uterine cervix or endometrium, for prolapse, or for a large bleeding fibroid tumor. Controversy arises over elective hysterectomy for sterilization or for cancer prophylaxis, with the medical profession sharply divided."

On removal of the gallbladder, he notes again widespread divisions in the medical profession. "Some physicians pursue the aggressive surgical policy that all gallstones should be removed together with the gallbladder unless the patient is an unacceptable operative risk; others are noninterventionist, promoting the medical point of view that patients may be safely buried with their gallstones and not because of them."

While everyone agrees that appendectomy for appendicitis is needed, "Other causes of abdominal pain, nausea and vomiting are commonly confused with appendicitis."

Similar debates are outlined for the other operations; it makes interesting reading.

⁸"Variations in Medical Care among Small Areas: The amount and cost of hospital treatment in a community have more to do with the number of physicians there, their medical specialties and the procedures they prefer than with the health of the residents," *Scientific American*, Vol. 246, No. 4, April 1982.

⁹"A Study of Hospital Utilization in Iowa in 1980," conducted by Servi-Share of Iowa and John Wennberg, for the Iowa Voluntary Cost Containment Committee (copy obtained from Wennberg).

¹⁰"Small Area Variations in the Use of Common Surgical Procedures: an International Comparison of New England, England and Norway," Kim McPherson, John E. Wennberg, Ole V. Hovind and Peter Clifford, *New*

England Journal of Medicine, 307:1310-1314, Nov. 18, 1982.

Some examples of rates per 100,000 persons from that paper:

	New England	Norway	West Midlands, England
Hernia repair	276	186	137
Appendectomy	128	150	177
Cholecystectomy	238	86	89
Prostatectomy	264	236	132
Hysterectomy	540	118	220

¹¹In 1981, Blue Cross and Blue Shield of North Carolina provided hospitalization insurance coverage for almost one-third of all North Carolinians under the age of 65. The company also is the fiscal intermediary for Part A of Medicare. BCBSNC's Health Economics Research unit has been conducting hospitalization utilization pattern studies that show wide variations in physician practice in North Carolina. See, Sandra B. Greene and William J. DeMaria, "Hospitalization Utilization Patterns in North Carolina: Implications for Cost of Care," *North Carolina Medical Journal*, September 1983, pp. 581-584.

¹²The DRGs change a bit each year — not the diagnostic categories so much, but the relative weight factor, the geometric mean length of stay and the outlier cutoff. The revised DRGs for 1985 are in the *Federal Register*, Vol. 49, No. 171, August 31, 1984, beginning on p. 34777 and are reproduced in this report as Appendix C.

The categories sometimes are relatively narrow: "Circulatory disorders with acute myocardial infarction, Cardiovascular complications, discharged alive," which is differentiated from another group without the complications, and another group where the heart attack patient died. On the other hand, all retinal procedures are lumped together, as is hypertension.

The relative weight is a key measure, varying from about 0.24 to about 6.9, a very big range. Some of the average lengths of stay are still long — 24 days for a kidney transplant — while others are just over a day.

¹³"Lawmakers focus on hospital-DRG squeeze," *Modern Healthcare*, March 29, 1985, pp. 54-58. The GAO report was based on visits to six communities, not a national study. Also discussed in "Heinz raises specter of early discharges," *Hospitals*, April 1, 1985, p. 31.

¹⁴"AMA says quality of care diminishing," *Modern Healthcare*, May 10, 1985, p. 26.

PART III

Chapter V

Investor-Owned and Managed
Hospitals in North Carolina

Chapter VI

Investor-Owned Hospital
Management Companies in
North Carolina

Chapter VII

Further Research by the
North Carolina Center

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with a halfway house, partial hospitalization program,
and an on-grounds therapeutic
junior and senior high school

Highland Hospital

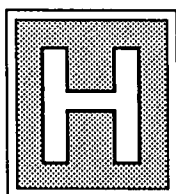
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CHAPTER V

NORTH CAROLINA'S INVESTOR-OWNED AND MANAGED HOSPITALS

by William Haflett



Chapter II described North Carolina's hospitals in general terms. This chapter focuses in greater detail on a subgroup of the state's 164 non-federal hospitals — those affiliated with investor-owned, or proprietary, hospital corporations.

In all, 38 of North Carolina's hospitals are operated on a for-profit basis: 26 are investor-owned and operated, 11 are managed under contract by an investor-owned multi-hospital system, and one is operated under a lease arrangement by an investor-owned system. Table 5.1 illustrates the role of investor-owned hospital corporations in the North Carolina hospital industry. Figure 5.1 reflects the growth of investor-owned hospital corporations in North Carolina since 1970.

Hospitals Owned and Operated by Investor-Owned Corporations

Ownership History. Of the 26 North Carolina hospitals owned by investor-owned corporations, nine were founded by their present owners. Twelve of North Carolina's 26 investor-owned hospitals were purchased by an investor-owned multi-hospital corporation from another investor-owned corporation. Only three investor-owned hospitals formerly were public hospitals, and all three have been purchased from county governments since 1980. The other two investor-owned facilities were purchased from not-for-profit corporations. Table 5.2 summarizes the

ownership history of North Carolina's 26 investor-owned hospitals.

Type of Service. Fifteen of the 26 investor-owned hospitals in North Carolina are specialty facilities, including nine psychiatric hospitals; three for the treatment of chemical dependency; two eye, ear, nose and throat hospitals; and one orthopedic hospital. The remaining 11 facilities are general, acute-care hospitals. Table 5.1 identifies the type of service provided by each of the state's 26 investor-owned facilities.

Hospitals Managed Under Contract by Investor-Owned Corporations

Twelve of North Carolina's hospitals are managed under contract by investor-owned corporations. Included in this total is one facility, Medical Park Hospital, owned by an independent investor-owned group. (For statistical purposes, Medical Park Hospital is included in the investor-owned, rather than managed, totals for this report.) The public and not-for-profit owners of the 11 remaining hospitals retain legal responsibility for their facilities' operations; however, they have entered into contracts delegating day-to-day management responsibility to investor-owned companies. All 12 hospitals are general, acute-care facilities; six are public hospitals owned by local hospital districts or county governments; five are owned by not-for-profit corporations, and one (Medical Park) is investor-owned. Tables 5.2 and 5.3 summarize the hospital management activity of investor-owned corporations in North Carolina.

Table 5.1: Summary Data on North Carolina Hospitals Affiliated with Investor-Owned Corporations

Hospital	City	County	Owned/ Managed	Type of Service	No. Beds	Type of Service			
						GEN	PSY	Other	TOTAL
<i>HSA I</i>									
Ashe Memorial Hospital	Jefferson	Ashe	M	GEN	76	1	0	0	1
Appalachian Hall	Asheville	Buncombe	O	PSY	125	2	2	2	6
Highland Hospital	Asheville	Buncombe	O	PSY	125	2	2	2	6
Frye Regional Medical Center	Hickory	Catawba	O	GEN	275	2	1	0	3
Hickory Memorial Hospital	Hickory	Catawba	O	PSY	64	2	1	0	3
Angel Community Hospital	Franklin	Macon	M	GEN	81	2	0	0	2
The McDowell Hospital	Marion	McDowell	M	GEN	65	1	0	0	1
Spruce Pine Community Hospital	Spruce Pine	Mitchell	M*	GEN	88	1	0	0	1
Burnsville Hospital	Burnsville	Yancey	M*	GEN	24	1	0	0	1
Blackwelder Memorial	Lenoir	Caldwell	O	GEN	31	2	0	0	2
<i>HSA II</i>									
Charter Mandala Center	Winston-Salem	Forsyth	O	PSY	75	3	3	0	6
Medical Park Hospital	Winston-Salem	Forsyth	O**	GEN	136	3	3	0	6
Charter Hills Hospital	Greensboro	Guilford	O	PSY	100	5	1	1	7
Humana Hospital Greensboro	Greensboro	Guilford	O	GEN	130	5	1	1	7
Morehead Memorial Hospital	Eden	Rockingham	M	GEN	133	2	0	0	2
<i>HSA III</i>									
Davis Community Hospital	Statesville	Iredell	O	GEN	149	3	0	0	3
Lowrance Memorial Hospital	Mooreville	Iredell	M	GEN	121	3	0	0	3
G. Crowell Memorial Hospital	Lincolnton	Lincoln	O	GEN	93	2	0	0	2
Charlotte EET Hospital	Charlotte	Mecklenburg	O	Other	68	4	1	4	9
Orthopaedic Hospital	Charlotte	Mecklenburg	O	Other	166	4	1	4	9

—table continued next page

Hospital Leased by Investor-Owned Corporation

In 1984, Brunswick County officials entered into a 40-year lease agreement with a multi-hospital investor-owned corporation whereby the corporation now has total operational control of the county-owned Brunswick Hospital, a general, acute-care facility. Tables 5.2 and 5.3 include this data.

Location of North Carolina Hospitals Affiliated With Investor-Owned Corporations

Map 5.1 reflects the geographic distribution of those hospitals affiliated with investor-owned corporations

throughout North Carolina. The federal government has established six Health Systems Agencies (HSA) in North Carolina. These HSAs, representing six geographical regions in the state, are used by federal and state governments for health planning purposes. Map 5.2 delineates the six HSA regions in the state.

HSA I encompasses 26 counties in the westernmost part of the state. There are five investor-owned and operated hospitals in HSA I. In addition, five hospitals in HSA I are managed under contract by investor-owned corporations.

HSA II includes 11 counties and covers most of the state's Piedmont Triad region. Four investor-owned hospitals operate in HSA II; one hospital in the region is managed under contract.

Table 5.1, continued

Hospital	City	County	Owned/ Managed	Type of Service	No. Beds	Type of Service			TOTAL
HSA IV									
McPherson Hospital	Durham	Durham	O	Other	30	2	0	2	4
Franklin Memorial Hospital	Louisburg	Franklin	M	GEN	76	1	0	0	1
Johnston Memorial Hospital	Smithfield	Johnston	M	GEN	180	1	0	0	1
Central Carolina Hospital	Sanford	Lee	O	GEN	142	1	0	0	1
Person County Memorial Hospital	Roxboro	Person	M	GEN	77	1	0	0	1
Charter Northridge	Raleigh	Wake	O	PSY	66	7	3	2	12
Holly Hill Hospital	Raleigh	Wake	O	PSY	108	7	3	2	12
Raleigh Community Hospital	Raleigh	Wake	O	GEN	140	7	3	2	12
HSA V									
The Brunswick Hospital	Supply	Brunswick	L***	GEN	60	2	0	0	2
Cape Fear Valley Hospital	Fayetteville	Cumberland	M	GEN	492	2	1	1	4
Highsmith-Rainey Memorial	Fayetteville	Cumberland	O	GEN	150	2	1	1	4
HSA Cumberland Hospital	Fayetteville	Cumberland	O	PSY	154	2	1	1	4
Life Center of Fayetteville	Fayetteville	Cumberland	O	Other	34	2	1	1	4
Life Center of Wilmington	Wilmington	New Hanover	O	Other	27	2	0	1	3
HSA VI									
Edgecombe General Hospital	Tarboro	Edgecombe	O	GEN	127	1	0	0	1
Community Hospital of Rocky Mt.	Rocky Mount	Nash	O	GEN	49	2	0	0	2
HSA Brynn Marr	Jacksonville	Onslow	O	PSY	34	1	1	1	3
Life Center of Jacksonville	Jacksonville	Onslow	O	Other	47	1	1	1	3

* Spruce Pine Community and Burnsville Hospital are the only two members of the Blue Ridge Hospital System.

** Owned by staff physicians; under management contract with an investor-owned corporation

*** Business leased by an investor-owned corporation

* Spruce Pine Community and Burnsville Hospital are the only two members of the Blue Ridge Hospital System.

** Owned by staff physicians; under management contract with an investor-owned corporation

*** Business leased by an investor-owned corporation

HSA III includes eight counties in the south-central part of the state. Investor-owned hospital corporations are affiliated with five hospitals in that region, owning and operating four and managing one.

HSA IV is comprised of 11 counties in the east central part of North Carolina. Five hospitals in HSA IV are owned and operated by investor-owned corporations; three more are managed under contract by investor-owned hospital systems.

HSA V includes 15 counties in the southeastern portion of the state. There are four investor-owned and operated hospitals in HSA V, as well as one hospital managed under contract by a hospital corporation. One additional facility is operated under a lease agreement between county officials and an investor-owned corporation.

HSA VI encompasses 29 counties in the eastern part of North Carolina. Four investor-owned and operated hospitals operate in HSA VI; no hospitals are managed under contract by an investor-owned corporation.

Size of North Carolina Hospitals Affiliated With Investor-Owned Corporations

The 38 North Carolina hospitals affiliated with investor-owned corporations vary considerably in size, as measured by the number of beds in use. The investor-owned and operated hospitals vary from 27 to 275 beds, while those facilities managed under a

Table 5.2: Summary Data of History of North Carolina Hospitals' Affiliation with Investor-Owned Corporations

	OWNERSHIP		MANAGEMENT		HISTORY	
	Independent Corporation	Investor-Owned	Public Owned	NFP-Owned	Initial Affiliations	Current
<i>HSA I</i>						
Ashe Memorial Hospital			HCA	1981	1981	
Appalachian Hall		PIA			1931	1982
Highland Hospital		PIA			1904	1982
Frye Regional Medical Center		AMI				1974
Hickory Memorial Hospital		UMC			1935	1979
Angel Community Hospital			HCA		1926	1983
The McDowell Hospital				Delta	1981	1981
Spruce Pine Community Hospital				HCA	1982	1982
Burnsville Hospital				HCA	1982	1982
Blackwelder Memorial Hospital		HCMC			1985	1985
<i>HSA II</i>						
Charter Mandala Center		CMC			1973	1981
Medical Park Hospital	X*				1971	1984
Charter Hills Hospital		CMC			1981	1981
Humana Hospital Greensboro		HUM			1977	1977
Morehead Memorial Hospital				HMP	1984	1984
<i>HSA III</i>						
Davis Community Hospital		HCA			1925	1983
Lowrance Memorial Hospital			HCA		1983	1983
G. Crowell Memorial Hospital		AMI			1907	1972
Charlotte EET Hospital		HUM			1923	1981
Orthopaedic Hospital		HCA			1971	1982
<i>HSA IV</i>						
McPherson Hospital	X				1926	1926
Franklin Memorial Hospital			HCA		1983	1983
Johnston Memorial Hospital			HCA		1983	1983
Central Carolina Hospital		AMI			1980	1980
Person County Memorial Hospital				HCA	1981	1981
Charter Northridge		CMC			1984	1984
Holly Hill Hospital		HCA			1978	1981
Raleigh Community Hospital		HCA			1950	1977
<i>HSA V</i>						
The Brunswick Hospital			HCA**		1981	1981
Cape Fear Valley Hospital			NME		1982	1982
Highsmith-Rainey Memorial		HCA			1901	1983
HSA Cumberland Hospital		HSA			1976	1983
Life Center of Fayetteville		HSA			1984	1984
Life Center of Wilmington		HSA			1984	1984
<i>HSA VI</i>						
Edgecombe General Hospital		HCA			1982	1982
Community Hospital of Rocky Mount		AMI			1913	1981
HSA Brynn Marr		HSA			1984	1984
Life Center of Jacksonville		HSA			1984	1984

* Managed under contract by HCA, owned by staff physicians.

** Leased by HCA, owned by Brunswick County.

Full names for the corporations listed above are as follows:

AMI ... American Medical International

CMC ... Charter Medical Corporation

Delta ... The Delta Group, Inc.

HCA ... Hospital Corporation of America

HMP ... Hospital Management Professionals

Ind ... Independently owned, not affiliated with a chain

NFP ... Owned by a local, not-for-profit corporation

*HSA ... Healthcare Services of America

*HUM ... Humana, Inc.

*NME ... National Medical Enterprises, Inc.

*PIA ... Psychiatric Institutes of America

*UMC ... United Medical Corporation

*HCMC ... Health Care Management Corporation

Figure 5.1: The Growth of Investor-Owned Hospital Involvement in North Carolina (Total — Owned, Managed, and Leased)

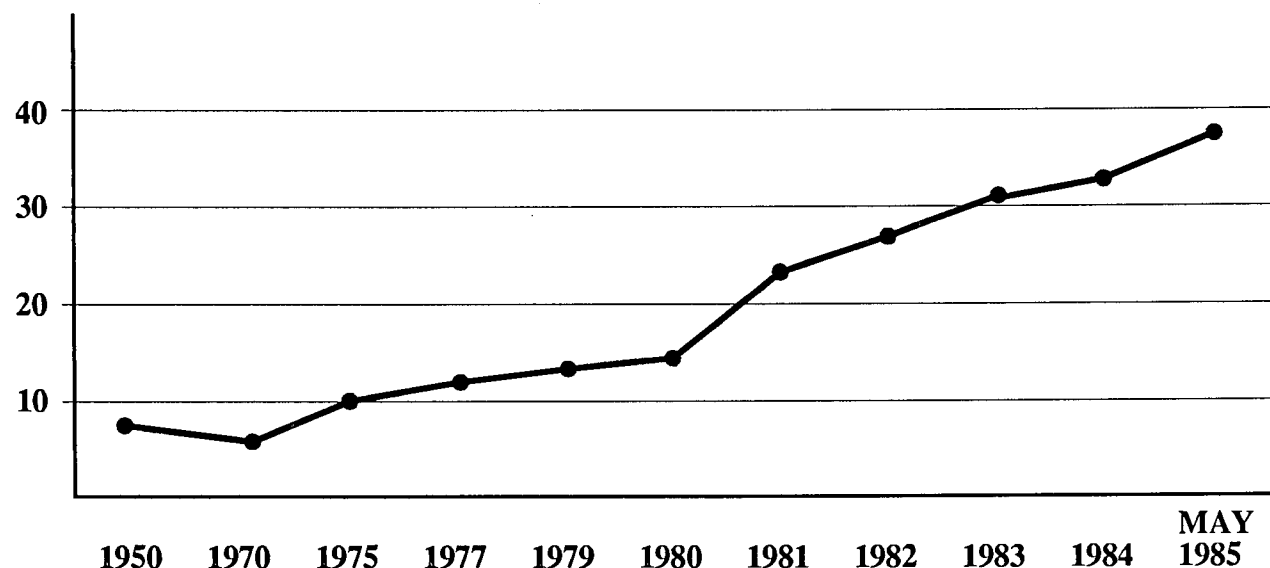
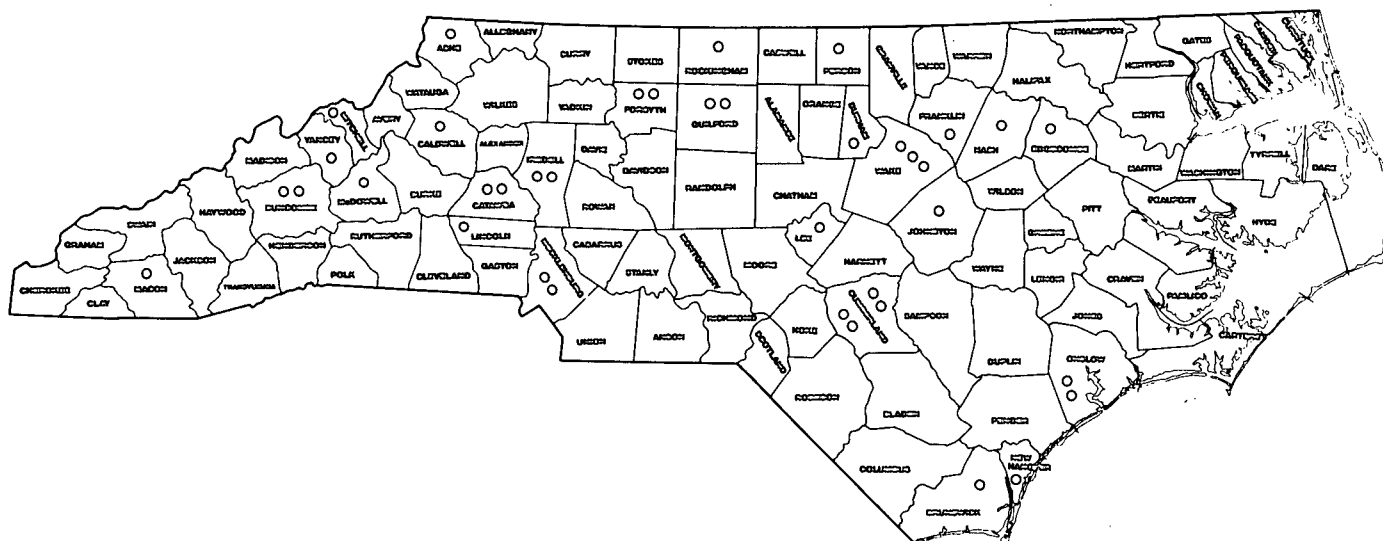


Table 5.3: North Carolina Hospitals Operated Under Management Contract by Investor-Owned Corporations

Hospital	City	County	Owner	Manager
<i>Operated under management contract:</i>				
1. Angel Community Hospital	Franklin	Macon	County	HCA
2. Ashe Memorial Hospital	Jefferson	Ashe	NFP	HCA
3. Spruce Pine Community Hospital	Spruce Pine	Mitchell	NFP	HCA
4. Franklin Memorial Hospital	Louisburg	Franklin	County	HCA
5. Johnston Memorial Hospital	Smithfield	Johnston	County	HCA
6. Lowrance Memorial Hospital	Mooreville	Iredell	County	HCA
7. Burnsville Hospital	Burnsville	Yancey	NFP	HCA
8. Person County Memorial Hospital	Roxboro	Person	NFP	HCA
9. Morehead Memorial Hospital	Eden	Rockingham	NFP	HMP
10. Cape Fear Valley Hospital	Fayetteville	Cumberland	County	NME
11. The McDowell Hospital	Marion	McDowell	NFP	Delta
<i>Leased</i>				
1. The Brunswick Hospital	Supply	Brunswick	County	HCA

In addition, one physician-owned facility, Medical Park Hospital in Winston-Salem (Forsyth County), is operated under management contract by HCA.

Map 5.1: N.C. Hospitals that Are Affiliated with Investor-Owned Corporations



Map 5.2: North Carolina Health Systems Agencies

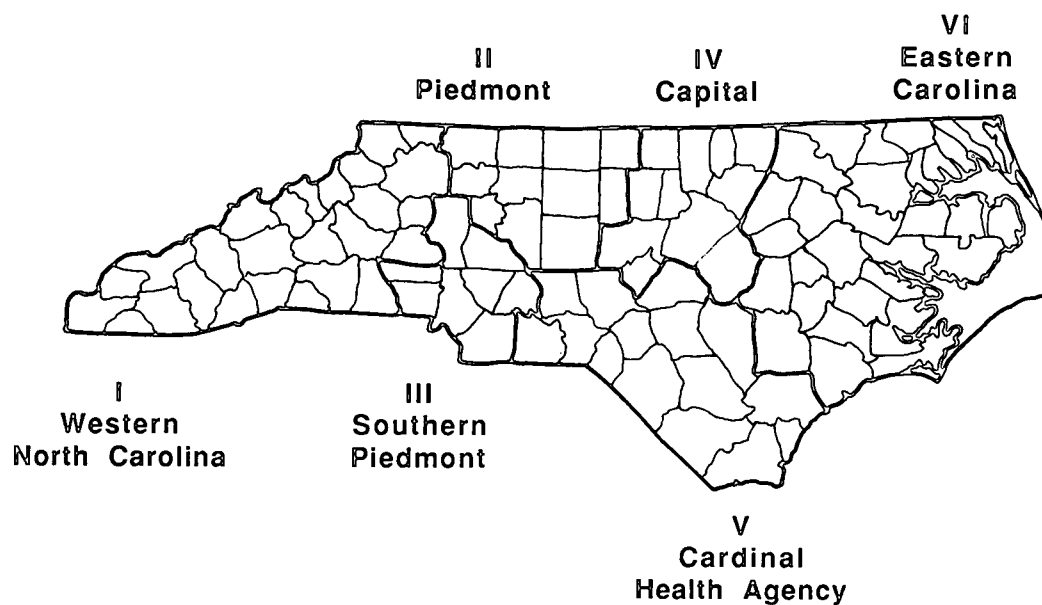


Table 5.4: Size of North Carolina Hospitals Affiliated With Investor-Owned Corporations

<i>TYPE OF AFFILIATION</i>	SIZE OF HOSPITAL (NUMBER OF BEDS IN USE)					TOTAL
	0-49	50-99	100-199	200-299	300+	
OWNED	7	7	11	1	0	26
MANAGED	1	6	3	0	1	11
LEASED	0	1	0	0	0	1
TOTAL	8	14	14	1	1	38

management contract by an investor-owned corporation range from 49 to 492 beds.

Slightly more than half of the 38 facilities (22) generally are considered to be small hospitals, having fewer than 100 beds. Many of the state's newest investor-owned facilities, particularly those devoted to a specialty, are in this group. Fifteen of the 38 facilities are medium-sized hospitals, with between 100 and 299 beds. Only one of the 38 hospitals in North Carolina affiliated with an investor-owned corporation has more than 300 beds and generally would be considered large. Table 5.1 shows the size of each North Carolina hospital affiliated with an investor-owned corporation. Table 5.4 summarizes the distribution in sizes among these 38 hospitals.

Individual Hospital Profiles

Information in greater detail can be found in two appendices to this report. The first, Appendix A, describes the individual histories of those North

Carolina hospitals currently affiliated with investor-owned corporations. This appendix also includes information on the number and types of public and not-for-profit hospitals in the counties in which the 38 investor-owned or managed hospitals are located in order to provide a perspective from which to evaluate the impact of investor-owned hospital corporations in a particular geographic region. The individual histories are presented by HSA region. Tables 5.1 and 5.2 provide summary data with reference to the information presented in Appendix A.

The second, Appendix B, provides individual profiles on each of the 38 North Carolina hospitals affiliated with investor-owned corporations. Information for the profile section has been taken from the 1982 and 1983 licensure reports submitted by each hospital to the Division of Facility Services within the North Carolina Department of Human Resources. Supplemental information has been provided by individual hospitals in response to inquiries from the North Carolina Center for Public Policy Research. The profiles are arranged in alphabetical order by hospital name. □

Note — The hospital industry in North Carolina is changing. One indication of this is that since the authors completed their final drafts, the N.C. Center has learned of changes in ownership and management in the following North Carolina hospitals:

- Alamance County Hospital (ACH) and Memorial Hospital of Alamance County (MHAC)** merged and are now owned by the not-for-profit Alamance Health Services Inc. MHAC had a new name — Alamance Memorial Hospital. SunHealth, Inc. continues to manage both hospitals.
- Bertie County Memorial Hospital** in Windsor, a county-owned general hospital, is now leased by the investor-owned Westworld Community Healthcare Inc. The hospital had been managed by SunAlliance up until the hospital closed in July 1985. The county reopened the hospital two months later upon entering a management contract with the investor-owned Forum Health Investors (FHI). Westworld replaced FHI in February 1986.
- CPC Cedar Springs Hospital**, a psychiatric and chemical dependency hospital for adolescents, opened October 14, 1985 in Mecklenburg County, and is owned and managed by the investor-owned Community Psychiatric Centers of Santa Anna, California.
- Cape Fear Valley Hospital** in Fayetteville, a county-owned general hospital, changed its management contract from the investor-owned National Medical Enterprises, Inc. to the not-for-profit SunHealth, Inc.
- Charter Pines Hospital** in Charlotte, a new psychiatric facility owned by Charter Medical Corporation, opened.
- Edgecombe General Hospital** in Tarboro, a general hospital owned by Hospital Corporation of America, has changed its name to Heritage Hospital and has built a new replacement facility.
- Fletcher Hospital** in Henderson County changed its name to Park Ridge Hospital. The not-for-profit Adventist Health Systems/Sunbelt Health Care Corporation continues to manage it.
- Gordon Crowell Hospital** in Lincolnton, owned by American Medical International, closed.
- Hugh Chatham Memorial Hospital** in Elkin, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Huntersville Hospital** in Mecklenburg County, a county-owned general hospital, closed.
- L. Richardson Memorial Hospital** in Greensboro, a not-for-profit hospital, changed its management contract from the not-for-profit SunAlliance to Hospital Corporation of America.
- Lowrance Memorial Hospital** in Mooresville was purchased from Iredell County by the investor-owned Hospital Management Associates. The general hospital had been managed under contract by Hospital Corporation of America.
- Rutherford Hospital** in Rutherfordton, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Warren General Hospital** in Warrenton, a county-owned general hospital, closed.
- Wayne County Memorial Hospital** in Goldsboro went from county-owned and operated status to a not-for-profit corporation-owned and operated status. On October 1, 1985, the hospital officially reorganized into the Wayne Memorial Hospital, Inc.

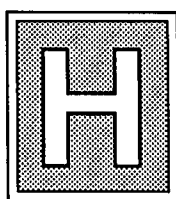
Changes in the text and tables have not been made to reflect these changes. These changes will be reflected in subsequent research and published reports.

— Editor

CHAPTER VI

INVESTOR-OWNED HOSPITAL MANAGEMENT COMPANIES IN NORTH CAROLINA

by Julie McCullough and Robin Woods



In preceding chapters, frequent references have been made to the investor-owned hospital corporations active in North Carolina. In all, 11 *for-profit* multi-institutional corporations either own or manage hospitals in the state. This chapter describes each corporation in greater detail. It also provides similar information regarding SunHealth, Inc., the largest *not-for-profit* hospital management corporation in North Carolina. A comparison of the activities of the 10 largest management companies in the United States and in North Carolina is provided in Table 6.1.

In the following pages, each investor-owned hospital corporation active in North Carolina is described in a profile using information available from personal and telephone interviews by Center staff, annual corporate reports to shareholders, and 10-k reports prepared for the U.S. Securities and Exchange Commission (SEC).¹ Each profile is presented in two sections. The first section, written in narrative form, describes corporate activities in general terms. Included is information regarding the company's affiliations with North Carolina hospitals, national and international corporate activities, financial performance and strategic plan. The second part of each profile consists of a data table that provides greater detail on these topics.

To the extent the information was available to us, each profile includes information on the number, location, and size of hospitals owned and/or operated by the hospital management company. Information about the company's financial structure, whether the

company owns any other subsidiary corporations, types and size of staff, and a listing of the officers and board of directors is also included.

Information about each company's finances is particularly helpful in understanding the growth of investor-owned hospital management companies. As is discussed in several of the corporate profiles that follow, the prices and annual dividends of many of the publicly traded hospital companies have increased dramatically over the last few years. When the prospective payment system for Medicare became effective in 1984, the stock market reacted to uncertainty over how well the hospitals could perform under this new system with a decline in price per share that lasted several weeks. However, during 1985, prices have increased again with growing investor confidence in the management companies' performance capabilities. Table 6.2 illustrates that four of the large investor-owned hospital companies posted large gains in net earnings and earnings per share in early 1985.

Each dollar invested in a hospital management corporation by shareholders allows the corporation to justify commercial loans and corporate debentures so that the company can raise large amounts of capital. This ability to raise money gives the companies flexibility in the types of businesses they can enter into. For instance, many hospital corporations are beginning to purchase or initiate health maintenance organizations and other types of insurance and several types of outpatient services — ambulatory surgery centers, urgent care centers, sports medicine centers, and doctor office centers. These businesses can serve as sources of income on their own and can be

Table 6.1: Comparison of the Ten Largest Investor-Owned Hospital Management Companies in the United States and North Carolina^a

Company	Number of Hospitals	Number of Beds
<i>UNITED STATES^b</i>		
1. Hospital Corporation of America	417	59,946
2. American Medical International	142	19,673
3. Humana, Inc.	92	18,311
4. National Medical Enterprises	71	11,388
5. NuMed, Inc.	24	6,714
6. Charter Medical Corporation	56	5,798
7. Republic Health Corporation	33	3,935
8. Universal Health Services	30	3,486
9. Paracelsus Hospital Corporation	23	3,407
10. Hospital Management Professionals	24	3,016
<i>NORTH CAROLINA^c</i>		
1. Hospital Corporation of America	16	1,727
2. American Medical International	4	492
3. National Medical Enterprises	1	492
4. Healthcare Services of American	5	296
5. Psychiatric Institutes of America	2	250
6. Charter Medical Corporation	3	241
7. Humana, Inc.	2	198
8. Hospital Management Professionals	1	133
9. The Delta Group	1	65
10. United Medical Corporation	1	64

^a The numbers of hospitals and beds include domestic- and foreign-owned, leased or managed, and hospitals under construction as of September 30, 1984.

^b Source: 1985 Directory of Investor-Owned Hospitals and Hospital Management Companies, published for the Federation of American Hospitals by FAH Review, Inc., Little Rock, Arkansas.

^c Compiled from N. C. Center research.

conduits for inpatient services offered by the hospitals owned by the parent corporation. As is discussed later in this chapter, Hospital Corporation of America took this idea one step further by proposing a merger with the country's largest hospital supply company, American Hospital Supply (AHS). AHS shareholders rejected the offer.²

Growth in the investor-owned hospital management company industry likely will continue. A recent article by Mark Tatge in *Modern Healthcare* estimated that even in the face of what is described as "the turbulence in the industry," investor-owned hospital companies could spend \$10 to \$20 billion on capital expenditures during the next five years. Tatge said that "because of depressed hospital census levels, officials of investor-owned companies say they are

leaning toward teaching hospitals and steering away from new construction."³

As noted above, one new growth avenue for investor-owned hospital management companies is to purchase prestigious teaching hospitals. Tatge interviewed one securities analyst who said that "[t]hese purchases will integrate health care delivery for the chains, give them prestige and give them a way to penetrate new markets. Those factors make for-profit chains more attractive to not-for-profit hospitals, thus making it easier for the chains to purchase not-for-profit hospitals when they are ready to sell."⁴

As discussed earlier, another growth area for investor-owned hospital management companies is the acquisition of insurance companies. Another article in the same issue of *Modern Healthcare* by

Table 6.2: 1985 Financial Performance of Four Investor-Owned Hospital Companies

Company Providers	Net Earnings (in millions)			Earnings/share		
	1985	1984	% change	1985	1984	% change
American Medical International* Beverly Hills, CA	\$52.6	\$44.6	+17.9 %	\$.62	\$.53	+17.0 %
Hospital Corporation of America Nashville, TN	92.6**	73.9	+25.3	1.02	.84	+21.4
Humana Inc.* Louisville, KY	58.1	52.0	+11.7	.59	.53	+11.3
National Medical Enterprises Inc.* Los Angeles, CA	40.5	34.4	+17.5	.53	.46	+15.2

* For quarter ending May 31, 1984. All others are for period ending June 30, 1985.

** Includes a \$26 million non-recurring gain.

Source: *Modern Healthcare*, August 2, 1985, p. 20.

THE WALL STREET PERSPECTIVE

In late 1983, the Institute of Medicine of the National Academy of Sciences began a two-year study of for-profit involvement in health care in the United States. Papers from a one-day workshop entitled "Trends in For-Profit Health Care" were later published in a report on the topic, *The New Health Care for Profit: Doctors and Hospitals in a Competitive Environment*.

One paper published in the report was by Richard B. Siegrist, Jr., of New England Medical Center in Boston, entitled "Wall Street and the For-Profit Management Companies." Siegrist wrote that

[t]en years ago it would have been difficult to find a Wall Street analyst who seriously followed the for-profit hospital management companies, much less one who would recommend that a client purchase the stock of any of these companies. Today the situation is drastically different. Approximately 25 security analysts spend half their time following the investor-owned hospital chains and would not hesitate to recommend the purchase of stock in these companies to almost any of their clients. In addition to these so-called sell side analysts, hundreds of portfolio managers, investment analysts, and retail stockbrokers keep in close touch with the performance of the for-profit hospital companies....

The sell side analysts cite four primary reasons for the remarkable success of the hospital management companies: access to capital, a favorable environment, economies of scale, and quality of management. ... Although equity [the

issuance of stock in the corporation] has played a role in the growth of these companies, debt has been much more important. The investor-owned companies have been able to use a variety of debt instruments, including domestic bank loans, Eurodollar financing, commercial paper, convertible debt, subordinated debentures, and industrial revenue bonds as well as traditional mortgage financing....

The South ... is a region with little regulation of health care, providing a favorable environment for the hospital management companies to grow and prosper. The primary regulatory tool that affects the companies, certificate of need (CON) legislation, has worked to their advantage. CON has protected hospitals in many areas by making the entry of competitors difficult. By acquiring a hospital in a single hospital community, a company can secure a virtual monopoly in that market.**

* Bradford H. Gray, ed., *The New Health Care for Profit: Doctors and Hospitals in a Competitive Environment* (Washington, D.C.: Institute of Medicine, National Academy Press, 1984), 178 pages.

** *Ibid.*, pp. 35 and 41-43.

Tatge and Cynthia Wallace states:

Hospital chains aggressively are getting into the insurance business to attract patients and fill empty hospital beds...Humana Inc., Louisville, KY; American Medical International Inc., Beverly Hills, CA; and Hospital Corp. of America, Nashville, TN; either have acquired or are in the process of acquiring indemnity insurance companies. National Medical Enterprises, Los Angeles, says it's shopping for one.⁵

To help understand the profiles a glossary of financial terms used is provided on this page. ☐

¹There are several ways to obtain a corporation's annual report and 10-k report. Often a corporation will mail out either of these reports upon request. If not, many public and university libraries keep copies of these reports on microfilm. Finally, a 10-k report can be purchased directly from the SEC in Washington, D.C.

²Further discussion of the investor-owned hospital industry is provided in an excerpt from *The New Health Care for Profit*, a 1983 publication of the Institute of Medicine of the National Academy of Sciences in Washington, D.C. (see Sidebar 1 on page 113).

³Mark Tatge, "Chains view acquisitions, will limit building projects," *Modern Healthcare* (Chicago, March 29, 1985), p. 101.

⁴*Ibid.*

⁵Mark Tatge and Cynthia Wallace, "Hospital chains entering insurance business to attract patients, fill beds," *Modern Healthcare* (Chicago, March 29, 1985), p. 56.

GLOSSARY OF FINANCIAL TERMS USED

Working capital: An absolute measure of a firm's liquidity.

$$\begin{aligned} & \text{Current assets} \\ & - \text{Current liabilities} \\ & = \text{Working capital} \end{aligned}$$

Current ratio: The simplest measure of a firm's ability to raise funds to meet short term obligations.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Profit margin: A measure of corporate profitability.

$$\text{Profit margin} = \frac{\text{Net income after taxes}}{\text{Total operating revenues}}$$

Return on equity: The best measure of the company's success in maximizing return on shareholders' investment in the firm.

$$\begin{aligned} \text{Return on equity} &= \\ & \frac{\text{Net income to common shareholders}}{\text{Common shareholders' equity}} \end{aligned}$$

Debt/capitalization ratio: A measure of the relative importance of debt and equity as a firm's financing source. The ratio is expressed as a percentage.

$$\begin{aligned} \text{Debt/capitalization Ratio} &= \\ & \frac{\text{Long term debt plus any debentures}}{\text{Total long term debt plus stockholders' equity}} \end{aligned}$$

1. American Medical International, Inc. (AMI)

Headquarters: 414 Camden Drive
Beverly Hills, California 90210
Phone: (213)278-6200

American Medical International (AMI) owns and operates four hospitals in North Carolina, making it the second most active investor-owned multi-hospital system in the state. AMI began its involvement in North Carolina in 1972 with the acquisition of Gordon Crowell Memorial Hospital in Lincolnton. In 1974, AMI purchased Glenn R. Frye Memorial Hospital (now Frye Regional Medical Center) in Hickory. Both hospitals were acquired from CHAMCO, an investor-owned hospital management system no longer active in the state. AMI built Central Carolina Hospital in Sanford as the replacement for Lee County Hospital after leasing Lee County Hospital for one year. AMI's most recent acquisition was Community Hospital of Rocky Mount, formerly Rocky Mount Sanitarium, included as part of AMI's purchase of Brookwood Health Services. All four hospitals are general acute-care facilities with a total of 503 beds.

AMI is the country's second largest investor-owned hospital management company. As of August 1984, AMI owned, leased or managed a total of 116 hospitals in 15 states. It also owns, leases, or manages 27 foreign facilities in 12 countries. There were 15,655 licensed beds in AMI's American hospitals and 3,575 beds in the company's foreign facilities.

Through its subsidiaries, AMI offers a wide range of clinical and administrative health care services. Subsidiary corporations provide diagnostic services, cardio-pulmonary services, physical therapy, alcoholism treatment centers, psychiatric and mental health services, hospital financial and information systems, medical records consulting, facility planning and design, personnel staffing, materials management systems, in-service education, accounting and reimbursement services, energy conservation services, equipment maintenance, physician recruitment, hospital-based home health care services, and ambulatory care centers.

Between 1978 and 1984, the number of hospitals owned and operated by AMI increased from 45 to 107. Major acquisitions included Hyatt Medical Enterprises, Inc. for approximately \$66 million (in 1980) and Brookwood Health Services, Inc. for approximately 3,350,000 common shares. The purchase of Hyatt Medical Enterprises brought eight acute-care hospitals, one skilled nursing facility and 26 hospitals managed under contract into the AMI system. In 1982, AMI sold the hospital management subsidiary of Hyatt Medical Enterprises to a new private company formed by former senior officers of the subsidiary.

In 1983, the company acquired five hospitals and the remaining 50% interest in a hospital in Singapore for an aggregate consideration of approximately \$48.5 million in cash and assumption of \$9.4 million in debt. In addition, AMI acquired three ambulatory care centers and 80% of an ambulatory services care company which had under development the planning and construction of 13 ambulatory care centers, for an aggregate cash consideration of \$10.5 million. Also in 1983, AMI sold 5 hospitals in the U.S. for an aggregate consideration of approximately \$17.4 million. There were no significant gains or losses from these sales.

On January 20, 1984 AMI acquired Lifemark Corporation for approximately 53,000,000 common shares. In 1984, AMI also acquired five hospitals, two alcohol rehabilitation centers, a respiratory care company, two ambulatory care centers, a psychiatric hospital and a 50% interest in a psychiatric hospital. The acquisitions were made for an aggregate consideration of approximately \$133 million in cash, assumption of \$13.7 million of debt, and 53,823 shares of AMI's common stock. AMI also sold four hospitals in 1984 for an aggregate cash consideration of approximately \$39.3 million.

In August 1984, more than 8,000 licensed physicians and surgeons were members of AMI hospital medical staffs. These physicians and surgeons are not employees of AMI or its hospitals and may terminate their affiliation at any time. AMI does not perform any medical research; therefore, no research staff is employed. As of August 31, 1984, AMI had 40,000 employees, of whom approximately 71% were full time personnel. About 42% of AMI's employees were nurses or other licensed technical personnel.

Data on bed utilization and occupancy rates for fiscal years 1981 through 1984 show an 11.6% decrease in occupancy rates over the four-year period, to 50.6%. Patient days in AMI's U.S. hospitals totaled 2,854,929 in 1984 — down from 3,028,347 in 1983.

AMI's fiscal 1984 statistics reflect the growing importance of hospital-based outpatient services. Outpatient visits to AMI hospitals increased 16% over fiscal 1983 while surgeries performed on an outpatient basis rose 34%.

Even though the acute care hospital remains the centerpiece of its system, AMI operates 11 freestanding single-day surgery centers, two industrial medicine clinics and has nine more surgery centers under construction. AMI also has a fleet of 70 mobile CT scanners and cardiovascular units. In 1985 it will open its first freestanding diagnostic imaging center in conjunction with the University of California at Irvine.

PROFILE:

American Medical International, Inc.*A. Hospitals and Beds Owned, Leased or Managed by AMI, as of November 1, 1982*

	Hospitals owned and operated by AMI		Hospitals leased and operated by AMI		Hospitals managed by AMI		Total - All AMI Hospitals	
Location	#hosp	#beds	#hosp	#beds	#hosp	#beds	#hosp	#beds
<i>United States</i>								
Alabama	6	1041	0	0	0	0	6	1041
Arkansas	5	622	0	0	0	0	5	622
California	21	2666	1	203	0	0	22	2869
Florida	10	1808	1	201	0	0	11	2009
Georgia	3	289	0	0	0	0	3	289
Indiana	1	120	0	0	0	0	1	120
Louisiana	5	437	0	0	0	0	5	437
Mississippi	3	244	0	0	1	100	4	344
Missouri	3	701	0	0	0	0	3	701
Nebraska	1	506	0	0	0	0	1	506
North Carolina	4	503	0	0	0	0	4	503
Ohio	1	50	0	0	0	0	1	50
Oklahoma	5	595	0	0	0	0	5	595
South Carolina	1	127	0	0	1	108	2	235
Texas	38	4536	5	798	0	0	43	5334
<i>Total - All</i>	107	14,245	7	1202	2	208	116	15,655
<i>U.S. Hospitals</i>								
<i>Average # of Beds/Hospital</i>	133.13 beds		171.71 beds		104 beds		134.96 beds	
<i>International Hospitals</i>								
Australia	0	0	2	194	0	0	2	194
Brazil	0	0	0	0	1	100	1	100
Canada	0	0	0	0	1	116	1	116
Ecuador	0	0	0	0	1	150	1	150
England	10	949	0	0	0	0	10	949
France	0	0	0	0	2	175	2	175
Greece	0	0	0	0	1	373	1	373
Saudi Arabia	0	0	0	0	3	738	3	738
Scotland	0	0	0	0	1	101	1	101
Singapore	0	0	0	0	1	149	1	149
Spain	1	131	0	0	1	199	2	330
Switzerland	2	200	0	0	0	0	2	200
<i>Total-Interna- tional Hospitals</i>	13	1280	2	194	12	2101	27	3575
<i>Average # of Beds per Hospital</i>	98.46 beds		97 beds		175.08 beds		132.40 beds	
<i>Total-All AMI Hospitals</i>	120	15,525	9	1396	14	2309	143	19230
<i>Average # of Beds per Hospital</i>	129.37 beds		155.11 beds		164.93 beds		134.47 beds	

B. AMI's North Carolina Hospitals

Owned and Operated by AMI	City	Type Hospital	Number of Beds
Frye Regional Medical Center	Hickory	General	218
Gordon Crowell Memorial Hospital	Lincolnton	General	93
Community Hospital of Rocky Mount	Rocky Mount	General	50
Central Carolina Hospital	Sanford	General	142

C. AMI's Health Care Subsidiaries

1. *AMI Ambulatory Care Centres, Inc.*, (Beverly Hills, California) new in fiscal year 1982; operates free-standing ambulatory care centers. Two facilities were in operation by the end of fiscal year 1982.
2. *AMI Diagnostic Services, Inc.*, (Los Angeles, California): provides mobile diagnostic services, including use of 50 mobile CAT scans and 8 ultrasound cardiovascular diagnostic imaging systems in fiscal year 1982.
3. *AMI Food and Nutrition Management, Inc.*, (Encino, California): provides total management and consulting services to hospital food and nutrition departments.
4. *AMI Pharmacy Management Services*, (Encino, California): provides central pharmacy management services to hospitals on a contract or consulting basis.
5. *AMI Psychiatric Services*, (Beverly Hills, California): develops and provides mental health care for individual patients and businesses offering employee assistance programs in the mental health area.
6. *Brookwood Recovery Centers*, (Birmingham, Alabama): operates three freestanding alcoholic recovery centers.
7. *Inhalation Therapy Services, Inc.*, (Lexington, Massachusetts): provides respiratory therapy and cardiac diagnosis services to over 200 hospitals in the U.S. It also contracts to provide services in Spain and Venezuela.
8. *Advanced Home Support Systems*: was formed in fiscal year 1982 as a subsidiary of Inhalation Therapy Services, Inc., to provide respiratory related home health care services and oxygen concentrators for home use.
9. *Physical Therapy Associates, Inc.*, (Wharton, Texas): provides management and physical therapy services to patients in hospitals in the southwest United States. In fiscal year 1982, this subsidiary began establishing freestanding physical therapy rehabilitation clinics.
10. *Professional Hospital Services*, (Los Angeles, California): provides automated hospital information systems. In 1982, it was awarded major contracts by two large (600+ bed) teaching hospitals.
11. *STAT Records, Inc.*, (Los Angeles, California): provides pre-accreditation services, computerized staff credential services, risk management programs and seminars on regulations and standards (primarily serves AMI hospitals).
12. *Stewart Design Group*, (Boston, Massachusetts): is an architectural firm which provides services in hospital planning, design, equipment and construction.

D. Medical Staffing/Employment

	As of August 31, 1984
Number of MD's on staff at AMI U.S. Hospitals	8,000
Number of employees in AMI's owned and operated hospitals	40,000

E. Utilization Statistics

Statistic*	As of year ending August 31,			
	1984	1983	1982	1981
Number of hospitals	110	111	81	74
Number of licensed bed	15,507	15,298	10,382	9,750
Patient Days	2,854,929	3,028,347	2,129,361	2,113,396
Occupancy Rate	50.6%	57.2%	58.3%	62.2%

* These statistics are calculated based on hospitals owned or leased and operated by AMI. Hospitals managed under contract are not included.

F. Financial Information

1. Abbreviated Income Statement:

	For year ending August, 31,			
	1984	1983	1982	1981
Operating Revenues	\$ 2,422,716,000	\$ 2,217,862,000	\$ 1,401,976,999	\$ 1,117,234,000
Net Operating Revenues	\$ 1,963,544,000	\$ 1,760,550,000	\$ 1,154,689,000	\$ 913,536,000
Operating Costs and Expenses	\$ 1,471,505,000	\$ 123,704,000	\$ 1,019,336,000	\$ 816,236,000
Net Income from Operations	\$ 879,278,000	\$ 233,441,000	\$ 135,353,000	\$ 97,300,000
Other Income (expense)	\$ 96,982,000	\$ 67,233,000	\$ 7,558,000	\$ 493,000
Income before provision for income taxes	\$ 252,762,000	\$ 233,441,000	\$ 142,911,000	\$ 96,807,000
Provision for Income taxes	\$ 115,700,000	\$ 104,100,000	\$ 64,100,000	\$ 46,000,000
Net income (after income taxes)	\$ 137,062,000	\$ 129,341,000	\$ 78,811,000	\$ 50,807,000
Earnings per share (common)	\$1.64	\$1.61	\$2.25	\$1.60

2. Balance Sheet

	As of August 31,			
	1984	1983	1982	1981
Current Assets	\$ 584,436,000	\$ 395,072,000	\$ 248,694,000	\$ 215,516,000
Net Property and Equipment	\$ 1,772,184,000	\$ 1,459,262,000	\$ 860,054,000	\$ 674,962,000
Other Assets	\$ 269,340,000	\$ 198,202,000	\$ 911,069,000	\$ 93,671,000
Total Assets	\$ 2,625,960,000	\$ 2,052,563,000	\$ 1,219,817,000	\$ 984,149,000
Current Liabilities	\$ 348,389,000	\$ 280,151,000	\$ 68,233,000	\$ 140,019,000
Long Term Debt and Subordinated Convertible Bonds	\$ 1,166,509,000	\$ 810,449,000	\$ 505,404,000	\$ 380,460,000
Total Liabilities	\$ 2,625,960,000	\$ 2,052,530,000	\$ 833,287,000	\$ 844,130,000
Shareholder's Equity	\$ 795,685,000	\$ 704,900,000	\$ 386,530,000	\$ 326,619,000
Total Capitalization	\$	\$	\$ 891,934,000	\$ 707,079,000

3. Financial Statistics and Ratios

	As of August 31,			
	1984	1983	1982	1981
Working Capital	\$ 236,047,000	\$ 114,921,000	\$ 80,461,000	\$ 75,497,000
Current Ratio	1.68:1	1.41:1	1.48:1	1.54:1
Net Profit Margin	5.6 %	5.6 %	5.6 %	4.5 %
Return on Equity	16.7 %	22.7 %	21.8 %	17.5 %
Debt/Capitalization Ratio	52.7 %	51.5 %	50.6 %	49.0 %

4. Contribution to Revenues

a. By Type of Service

	1984	1983	1982	1981	1980
Room and Board	27.0%	28.0%	30.0%	32.0%	33.0%
Ancillary medical services	73.0%	72.0%	70.0%	68.0%	67.0%
	100 %	100 %	100 %	100 %	100 %

b. By Type of Payment

	1984	1983	1982	1981	1980
Medicare	44.0%	45.0%	45.0%	45.0%	45.0%
Medicaid	5.0%	5.0%	6.0%	7.0%	7.0%
Other Sources	51.0%	50.0%	49.0%	48.0%	48.0%
	100 %	100 %	100 %	100 %	100 %

c. By Business Segment

	1984	1983	1982	1981	1980
U.S. Hospital Operations			86.6%	88.9%	88.0%
International Hospital Operations			8.0%	5.5%	6.1%
Health Care Services			5.4%	5.6%	5.9%
Total			100 %	100 %	100 %

G. Board of Directors

Name	Title
Uranus J. Appel	Founder-Chairman, AMI, Inc.
R. Bruce Andrews	Executive VP and Chief Financial Officer, AMI, Inc.
Royce Diener	Chairman and Chief Executive Officer, AMI, Inc.
Thomas E. Donahue, Jr.	Executive VP, Secretary and General Counsel, AMI, Inc.
Donald Guinn	Chairman of the Board, Pacific Telesis Group
James B. Jacobson	Executive Vice President Cal Fed Inc. and California Federal Saving and Loan
Bentley Morriss	President, Consolidated Advertising Directors, Inc., Advertising Public Relations and Marketing Consultants
Bernard Schriever	General USAF (retired); Chairman of the Board, Schriever and McKee Management Consultants
Sidney Senter, M.D.	Physician (retired) and Investor
Rocco C. Sicillano	Chairman and Chief Executive Officer, Ticor, Financial Services Management Company
Thomas P. Nickell, Jr.	Consultant to Eleemosynary Institutions
Charles P. Reilly	Executive Vice President, Director of Corporate Development, AMI
Henry Rosovsky, Ph.D.	Geyser University Professor of Economics, Harvard University
Paul E. Sullivan	Executive Vice President, (retired), Bank of America
S. Jerome Tamkin, Ph.D.	Private Investor and Consultant
Norman Traverse, M.D.	President, Inhalation Therapy Services, Inc. (AMI Subsidiary)
Walter L. Weisman	President and Chief Operating Officer, American Medical International, Inc.

2. Charter Medical Corporation (CMC)

Headquarters: 577 Mulberry Street
Macon, Georgia 31298
Phone: (912)742-1161

Charter Medical Corporation (CMC) owns and operates two psychiatric facilities in North Carolina: the 100-bed Charter Hills Hospital in Greensboro, and the 75-bed Mandala Center in Winston-Salem. A third Charter hospital in North Carolina is Charter Northridge Hospital in Raleigh, a 66-bed facility specializing in the treatment of chemical dependency. A fourth Charter hospital, a psychiatric facility with 60 beds, is under construction in Charlotte.

At the close of fiscal 1984, CMC was operating 40 hospitals in the U.S. containing 4,825 beds. Of the facilities, 28 were psychiatric hospitals and 12 were general acute care facilities. According to CMC's 1984 annual report, an additional 10 hospitals are scheduled for completion by the close of fiscal 1985.

In addition to its U.S. facilities, CMC operates two facilities in England with a total of 78 beds. CMC also manages one 130-bed hospital in Saudi Arabia. CMC thus operates three hospitals abroad containing 208 beds.

CMC seeks continued growth by adding new services as well as by geographic expansion. Charter's Immediate Care Centers provide 18 hour-per-day, seven-day-per-week treatment of non-life-threatening medical needs. Annual or employment-related physical exams also are conducted at these centers. CMC continues to add new services in conjunction with its emphasis on psychiatric and addictive disease treatment, including separate units for child, adolescent, young adult, adult, and geriatric patients.

CMC's capital investments for new hospitals, expansions renovations, acquisitions, and equipment have increased at a compound annual rate of 41% since 1980.

In fiscal 1984, CMC hospitals provided 887,195 days of patient care, compared to 803,388 in fiscal 1983. CMC hospitals had a 51.4% aggregate occupancy rate in fiscal 1984, down from 55.55% in 1983.

Earnings were up 32% in 1984 to \$1.33/share, compared with \$.76/share in 1983. Net income was \$35.2 million in 1984, up 31% from 1983. In addition, operating revenues of \$493.3 million amounted to a 17% increase over 1983 figures.

PROFILE:

Charter Medical Corporation

A. Charter Medical Corporation Facilities (as of September 30, 1984)

1. Facilities Owned and/or Operated

a. In Operation

	# of Operated Psychiatric		# of Operated Acute Care		# of Managed		Total #	
	Hosp	Beds	Hosp	Beds	Hosp	Beds	Hosp	Beds
<i>United States</i>								
Alabama	3	263	0	0	0	0	3	263
Alaska	1	80	0	0	0	0	1	80
Arkansas	1	65	0	0	0	0	1	65
California	5	642	1	184	0	0	6	826
Florida	1	104	0	0	0	0	1	104
Georgia	5	659	4	461	0	0	9	1120
Illinois	1	118	0	0	0	0	1	118
Kentucky	2	146	0	0	0	0	2	146
Louisiana	0	0	1	258	0	0	1	258
Missouri	0	0	1	200	0	0	1	200
Nevada	0	0	1	225	0	0	1	225
North Carolina	3	241	0	0	0	0	3	341
South Carolina	1	80	0	0	0	0	1	80
Tennessee	1	150	0	0	0	0	1	150
Texas	3	224	3	314	0	0	6	538
Virginia	2	258	1	153	0	0	3	411
<i>Total U.S.</i>								
<i>Facilities</i>	29	3030	12	1795	0	0	41	4825
<i>Av. # Beds</i>		104.48		149.58		—		117.68

International Facilities

England	2	78	0	0	0	0	2	78
Saudi Arabia	0	0	0	0	1	130	1	130
<i>Total Int'l</i>								
<i>Facilities</i>	2	78	0	0	1	130	3	208
<i>Av. # Beds</i>		39		—		130		69.3
<i>Total of All</i>	31	3108	12	1795	1	130	44	5033

b. Hospitals Under Construction

United States

Florida	1	68	0	0	0	0	1	68
Georgia	1	65	0	0	—	—	1	65
Indiana	1	65	0	0	—	—	1	65
Louisiana	1	75	0	0	—	—	1	75
Missouri	1	80	0	0	—	—	1	80
New Mexico	1	80	0	0	—	—	1	80
Nevada	1	80	0	0	—	—	1	80
North Carolina	1	60	0	0	—	—	1	60
Texas	3	226	0	0	—	—	3	226
<i>Total U.S.</i>								
<i>Facilities</i>	11	799	0	0	—	—	11	799
<i>Av. # Beds</i>		72.64		—		—		72.64

	# of Operated Pyschiatric		# of Operated Acute Care		# of Managed		Total #	
	Hosp	Beds	Hosp	Beds	Hosp	Beds	Hosp	Beds
<i>International</i>								
England	2	78	—	—	—	—	2	78
Saudi Arabia	—	—	—	—	1	130	1	130
Total Int'l Facilities	2	78	—	—	1	130	3	208
<i>Total Hospitals Under Construction</i>	13	877			—	—	14	1007
<i>Av. # Beds</i>		67.46				130		71.93

B. Charter Medical Corporation's N.C. Facilities

Owned and Operated	City	Type of Hosp.	# of Beds
Charter Hills	Greensboro	Psychiatric	100
Mandala Center	Winston-Salem	Psychiatric	75
Charter Northridge Hospital	Raleigh	Chemical Dependency	66

C. Utilization Statistics

	Year Ending August 31,			
	1984	1983	1982	1981
Number of Hospitals	44	38	31	27
Total Licensed Hospital beds	4839	4311	3651	3352
Total Patient Days	887,195	803,388	712,406	647,944
Percent Occupancy	51.4%	55.55%	57.3%	55.3%
Average Size (# of Beds) per Hospital	120.62	113.45	117.77	124.15

D. Financial Information

1. Income Statement	1984	1983	1982	1981
Total Operating				
Revenues	\$ 493,273,000	\$ 422,081,000	\$ 342,212,000	\$ 261,774,000
Net Revenues	\$ 425,055,000	\$ 358,096,000	\$ 294,784,000	\$ 228,027,000
Total Cost and Expenses	\$ 361,592,000	\$ 310,660,000	\$ 261,072,000	\$ 207,647,000
Income Before				
Income Taxes	\$ 63,463,000	\$ 48,036,000	\$ 33,712,000	\$ 20,380,000
Provision for				
Income Taxes	\$ 28,304,000	\$ 21,174,000	\$ 15,331,000	\$ 8,810,000
Net Income After				
Income Taxes	\$ 31,159,000	\$ 28,862,000	\$ 18,381,000	\$ 11,570,000
Earnings per Common Share	\$1.76	\$1.33	\$1.45	\$0.98

2. Balance Sheet

		As of August 31,		
		1984	1983	1982
Current Assets	\$	118,994,000	\$ 134,480,000	\$ 124,741,000
Net Property & Equipment	\$	331,295,000	\$ 225,037,000	\$ 161,496,000
Total Assets	\$	501,251,000	\$ 400,307,000	\$ 315,317,000
Current Liabilities	\$	73,933,000	\$ 68,807,000	\$ 52,231,000
Long-Term Debt & Capital Lease Obligations	\$	264,012,000	\$ 205,161,000	\$ 161,596,000
Total Liabilities				\$ 232,115,000
Total Stockholders Equity	\$	129,481,000	\$ 99,358,000	\$ 83,202,000
Total Capitalization				\$ 244,798,000

3. Financial Ratios

		Year Ending		
		1984	1983	1982
Working Capital	\$	45,061,000	\$ 65,673,000	\$ 72,510,000
Current Ratios		1.6:1	2.0:1	
Net Profit Margin		8.2%	7.3%	6.0%
Return on Equity		31.6%	30.7%	22.95%
Debt/Capitalization		67.1%	67.4%	66.0%

E. Board of Directors

Name	Title
William A. Fickling, Jr.	Chairman, Chief Executive
Ray Stevenson	President
William H. Anderson, II	Chairman of the Board and President, Southern Trust Corp, Macon, Ga.
Frank M. Blanton, M.D.	Practicing Physician, Richmond, Va.
Dr. James E. Martin	President, Auburn University, Auburn, Alabama
Rolland A. Maxwell	Chairman of the Board, John McDaniel Wholesale Supply, Inc., Atlanta, Ga.
James T. McAgee, Jr.	Executive Vice President, Hospital Operations
K.W. Slayden	President PGA Town Properties, Inc. Saw Grass, Florida
Stanley S. Trotman, Jr.	Managing Director, Drexel Burnham Lambert, Inc., New York, NY

3. The Delta Group, Inc.

Headquarters: Bankers Trust Plaza
Greenville, S.C. 29601
Phone: (803)235-8923

The Delta Group, Inc. (Delta) manages under contract one hospital in North Carolina, the McDowell Hospital (formerly Marion General Hospital) in Marion. This hospital has 62 beds and is the only facility that Delta manages.

Delta is a spin-off of Resource Management Associates, which in turn is a spin-off of Health Care Concepts. Health Care Concepts is a management consulting firm specializing in long-range hospital planning. Resource Management Associates was formed as a sole proprietorship to assume responsibility for Health Care Concept's contract management and short-range planning activities. As Resource Management Associates expanded, a further division was seen to be necessary. Resource Management Associates continues to operate as a management consulting firm, while Delta took over the management contract for The McDowell Hospital.

Financial and operational data is not available for this company.

PROFILE:

The Delta Group, Inc.

A. Hospitals Contract Managed by The Delta Group

Name	Location	Type of Hosp.	# of Beds
The McDowell Hospital	Marion, NC	General, NFP	62

B. Board of Directors:

Name	Title
Craig Forthman	President and Chairman and Treasurer of the Delta Group, Inc.
James Hawkins	Secretary
Eric Hansen	
Oscar Aylor	

4. Health Care Management Corporation (HCMC)

(A subsidiary of Basic American Medical, Inc.)
Headquarters: 1007 First Avenue
Columbus, Georgia 31901
Phone: (404)323-9566

Health Care Management Corporation (HCMC) is a wholly owned subsidiary of Basic American Medical, Inc. (BAM) of Indianapolis, Indiana, operating BAM's hospitals that are smaller than 100 beds in size. HCMC owns and operates one hospital in North Carolina, Blackwelder Memorial Hospital in Lenoir, which has 31 beds. HCMC owns and operates 16 other hospitals in Georgia, Alabama, Florida, and South Carolina.

5. Healthcare Services of America, Inc. (HSA)

Headquarters: 200 Southbridge Parkway, Suite 200
 Birmingham, Alabama 35209-1303
 Phone: (205)879-8970

Healthcare Services of America owns and operates five hospitals in eastern North Carolina: HSA Brynn Marr and Life Center of Jacksonville in Jacksonville; HSA Cumberland and Life Center of Fayetteville in Fayetteville; and in Wilmington, the Life Center of Wilmington. These five psychiatric hospitals have a combined total of 296 beds.

HSA and its subsidiary own and operate psychiatric and chemical dependency facilities in nine states, with 20 currently in operation and three under construction.

HSA owns 15 hospitals which have a combined total of 945 beds. HSA manages two additional facilities with 76 beds. HSA's subsidiary, the Americare Corporation, manages three hospitals which contain a total of 116 beds. In all, HSA owns or manages, either on its own or through Americare Corporation, 20 hospitals with a combined total of 1,137 beds. The three hospitals under construction will add another 146 beds to the total.

PROFILE:

Healthcare Services of America

Subsidiary: The Americare Corporation
 700 E. Main Street, Suite 1015
 Richmond, Virginia 23919
 Phone: (804)649-9337

Hospitals in Operation: Domestic - Owned

State	Number of Hospitals	Number of Beds
Alabama	1	130
Florida	1	79
Louisiana	1	56
Michigan	2	144
Missouri	1	100
North Carolina	5	296
South Carolina	2	98
Virginia	2	76

Hospitals Under Construction: Domestic - Owned

Louisiana	1	80
Michigan	1	16
Oklahoma	1	50

6. Hospital Corporation of America (HCA)

Headquarters: One Park Plaza
Nashville, Tennessee 37203
Phone: (615)327-9551

Hospital Corporation of America (HCA) is the largest investor-owned hospital management company in the country. It is also the most active hospital management company in North Carolina. In North Carolina, HCA owns and operates four general hospitals: Highsmith-Rainey Memorial in Fayetteville, Edgecombe General in Tarboro, Raleigh Community in Raleigh, and Davis Hospital in Statesville. HCA also owns two specialty hospitals in the state: Orthopaedic Hospital in Charlotte, which is North Carolina's only orthopedic hospital, and Holly Hill Hospital, a psychiatric facility in Raleigh. HCA leases The Brunswick Hospital in Supply and has complete operational control of the hospital.

HCA has management contracts with nine North Carolina hospitals: the independent investor-owned Medical Park Hospital in Winston-Salem, Angel Community Hospital in Franklin, Spruce Pine Community Hospital in Spruce Pine, Burnsville Hospital in Burnsville, Ashe Memorial Hospital in Jefferson, Person County Hospital in Roxboro, Johnston Memorial Hospital in Smithfield, Franklin Memorial Hospital in Louisburg, and Lowrance Hospital in Mooresville. In all, 16 of North Carolina's 164 non-federal hospitals are part of the HCA system.

In 1977, HCA acquired Raleigh Community Hospital from Charter Medical Corporation. Until 1981, Raleigh Community was the only North Carolina hospital affiliated with HCA. HCA acquired the businesses of Orthopaedic Hospital and Holly Hill Hospital and negotiated management contracts with three other facilities in 1981. In 1982, one additional hospital was purchased and a consulting contract with Craven County Hospital was signed. HCA expanded its operations by seven hospitals in 1983, adding five by management contract, one through a purchase agreement, and one (Highsmith-Rainey Memorial) as a replacement facility formerly managed by another corporation. HCA now owns and operates 900 beds in North Carolina and contract-manages facilities with an additional 920 beds.

As of December 31, 1984, HCA owned, operated, or managed 416 hospitals and 60,133 beds worldwide. U. S. operations included 173 general and 27 psychiatric hospitals owned and operated and 185 hospitals under management contract. Foreign operations included ownership of 25 hospitals and contract management of two facilities. The company also has developed medical office buildings adjacent to certain of its hospitals. Between December 31, 1978 and December 31, 1984, HCA increased its total of owned or leased hospitals from 84 to 225, with a corresponding increase in the number of beds from 13,768 to 34,727. Over the same period, the number of hospitals under management contract grew from 28 to 187; bed capacity increased from 4,268 to 25,056. The most significant factor in this expansion was the acquisition of Hospital Affiliates International, Inc. (HAI) in 1981 for \$621 million in cash and common stock. HAI owned or leased 57 hospitals, managed under contract 102 hospitals, and owned or managed 19 skilled nursing facilities. In 1982, HCA acquired or leased 22 hospitals in the U.S. and abroad at an aggregate cost of \$117 million. On January 3, 1983, HCA sold 18 hospitals and related medical office buildings to Republic Health Corporation for \$120 million in cash and 200,000 shares of Republic common stock. Total capital expenditures for construction and acquisition in 1982 was \$616 million.

During 1984, HCA purchased three hospitals and an insurance claims processing company at an aggregate total cost of \$31.2 million including \$6.8 million of liabilities assumed. During 1984, the company also sold two of its hospitals (including related medical office buildings) resulting in a pre-tax gain of \$16.8 million. In February 1985, HCA purchased an 80% interest in the Lovelace Medical Center in Albuquerque, N.M. for approximately \$28 million. The company has agreements with Forum Group, Inc. for the purchase of 14 hospitals and with the Religious

Congregation of the Adorers of the Blood of Christ for the lease of St. Mary's Hospital in Enid, Oklahoma. Additionally, HCA has agreements for the purchase of Wesley Medical Center, Wichita, Kansas and Presbyterian Hospital, Oklahoma City, Oklahoma.

On December 31, 1984, approximately 30,400 licensed physicians were on staff at HCA's U.S. hospitals. HCA and its subsidiaries employed 79,000 persons, 80% of whom were full-time personnel.

Inpatient utilization of HCA-owned general hospitals in the U.S. declined in both 1984 and 1983. In 1984, admissions and patient days declined by 4% and 9% respectively. In 1983, the respective declines were 4% and 5%. The average occupancy rates of the company's domestically-owned general hospitals were 55.4% in 1984, 63.1% in 1983, and 65.7% in 1982.

The shift to outpatient services is, in part, responsible for the 28% increase in HCA's outpatient revenues in 1984 to \$386 million. Outpatient revenues of \$302 million in 1983 were 12% higher than the \$269 million in 1982. Also, due primarily to increases in the number of psychiatric facilities and beds in service, revenues from the company's psychiatric hospitals increased 20% in 1984 to \$231 million. Psychiatric revenues of \$192 million in 1983 were 30% greater than the \$148 million in 1982.

Standard & Poor's (S&P) and Merrill Lynch evaluations of HCA's financial future are that the corporation's future looks bright. Merrill Lynch says that revenues should post a healthy gain in 1985, aided by contributions from additional units acquired or constructed, new management contracts, and greater intensity of service. Margins are expected to continue to expand, aided by improved efficiency.

Standard & Poor's says that HCA's future looks bright. In early 1985, HCA and American Hospital Supply (AHS) Corporation announced a proposal to merge. The proposal was rejected by AHS shareholders in July 1985. The proposed HCA/AHS merger sent shock waves throughout the health care industry. Since AHS is the largest distributor of hospital products, hospitals all across the country were concerned that HCA hospitals would have a competitive edge over hospitals not affiliated with HCA. Some hospitals threatened to remove their business from AHS.* AHS shareholders decided, instead, to merge with Baxter Travenol, another hospital supply company. HCA is also in a position to merge with Beverly Enterprises of Los Angeles, the nation's largest nursing home chain, in two years. HCA recently exchanged common stock it owned in Beverly for convertible debentures. HCA can exercise its conversion rights in two years under securities law provisions.

* Ford S. Worthy, "A Health Care Merger That Pains Hospitals," *Fortune* (June 24, 1985), pp. 106-110.

PROFILE:

Hospital Corporation of America

A. Facilities Owned, Leased or Managed by HCA as of 12/31/84

Location	General operated by HCA		Psychiatric operated by HCA		General managed by HCA		Total HCA	
	#units	#beds	#hosp	#beds	#hosp	#beds	#hosp	#beds
<i>United States</i>								
Alabama	9	1295	0	0	7	1056	16	2351
Arizona	2	316	0	0	2	362	4	678
Arkansas	2	463	0	0	7	600	9	1063
California	9	1632	2	270	5	372	16	2274
Colorado	0	0	0	0	5	649	5	649
Florida	29	5549	2	146	11	1152	42	6847
Georgia	10	2060	1	76	9	1352	20	3488
Idaho	1	150	0	0	3	473	4	623
Illinois	0	0	2	354	5	597	7	951
Indiana	1	284	0	0	2	162	3	446
Iowa	0	0	0	0	2	174	2	174
Kansas	0	0	0	0	1	150	1	150
Kentucky	8	930	0	0	6	619	14	1549
Louisiana	5	685	3	600	4	330	12	1615
Maine	0	0	0	0	5	345	5	345
Maryland	0	0	0	0	1	106	1	106
Massachusetts	0	0	0	0	7	1281	7	1281
Michigan	0	0	0	0	5	423	5	423
Minnesota	0	0	0	0	1	254	1	254
Mississippi	1	144	0	0	2	600	3	744
Missouri	1	120	0	0	4	459	5	579
Nebraska	0	0	0	0	2	338	2	338
Nevada	0	0	1	95	1	359	2	454
New Hampshire	1	86	0	0	1	144	2	230
New Jersey	0	0	0	0	3	1080	3	1080
New Mexico	2	394	1	80	4	350	7	824
New York	0	0	0	0	6	1517	6	1517
North Carolina	6	792	1	108	9	920	16	1820
Ohio	0	0	0	0	2	294	2	294
Oklahoma	2	199	0	0	0	0	2	199
Oregon	1	80	0	0	4	461	5	541
Pennsylvania	0	0	0	0	9	1194	9	1194
South Carolina	6	911	0	0	8	998	14	1909
South Dakota	0	0	0	0	1	140	1	140

Location	General operated by HCA		Psychiatric operated by HCA		General managed by HCA		Total HCA	
	#units	#beds	#hosp	#beds	#hosp	#beds	#hosp	#beds
Tennessee	30	4057	3	304	7	811	40	5172
Texas	31	5872	7	1026	16	1966	54	8864
Utah	6	535	0	0	0	0	6	535
Vermont	0	0	0	0	1	139	1	139
Virginia	8	2060	4	496	8	1289	20	3845
Washington	0	0	0	0	1	100	1	100
West Virginia	1	266	0	0	6	783	7	1049
Wisconsin	0	0	0	0	2	242	2	242
Wyoming	1	70	0	0	1	55	2	125
<i>Total U.S. Hospitals</i>	173	28,950	27	3555	186	24696	386	57201
<i>Av. # Beds/Hospitals</i>		167.34		131.67		132.77		148.19

International

Australia	11	995	0	0	0	0	11	995
Brazil	6	803	0	0	0	0	6	803
Rep. of Panama	1	122	0	0	0	0	1	122
Saudia Arabia	0	0	0	0	2	500	2	500
United Kingdom	7	302	0	0	0	0	7	302
<i>Total Int'l Hospitals</i>	25	2222	0	0	2	500	27	272
<i>Av. # Beds/Hosp.</i>		88.88		--		250.0		100.81

B. Summary of HCA Hospitals on December 31, 1984

	# of Hospitals	# of Beds
U.S. Owned General	173	28950
U.S. General Managed	186	24696
U.S. Psychiatric Owned	27	3555
<i>Total U.S. Hospitals</i>	386	57201
International owned	25	2222
International managed	2	500
International consulting	4	350
<i>Total International Hospitals</i>	31	3072
<i>Total U.S. and International Hospitals</i>	417	60273

C. HCA N.C. Hospitals as of 6/85:

Owned or Leased and Operated	City	Type of Service	# of Beds
Orthopaedic Hospital of Charlotte	Charlotte	Orthopedic	95
Highsmith-Rainey Memorial Hospital	Fayetteville	General	166
Holly Hill Hospital	Raleigh	Psychiatric	58
Raleigh Community Hospital	Raleigh	General	140
Davis Hospital	Statesville	General	167
Edgecombe General	Tarboro	General	127

Owned or Leased and Operated	City	Type of Service	# of Beds
Leased			
Brunswick County Hospital	Supply	General, public authority	60
Managed			
Angel Community Hospital	Franklin	General, public	81
Ashe Memorial	Jefferson	General, NFP	76
Franklin Memorial Hospital	Louisburg	General, public	76
Lowrance Hospital	Mooreville	General, public	121
Person County Memorial Hospital	Roxboro	General, NFP	88
Johnston Memorial Hospital	Smithfield	General, county	180
Spruce Pine Community Hospital	Spruce Pine	General, NFP	88
Burnsville Hospital	Burnsville	General, NFP	24
Medical Park Hospital	Winston-Salem	General, IO	136

D. Utilization Statistics

	For Year Ending December 31,			
	1984	1983	1982	1981
Number of Hospitals	385	380	351	342
Number of Beds	57,061	54,699	50,172	49,866
Percent Occupancy	55.4 %	63.1 %	66.0 %	68.0 %
Average Size (#Beds) per Hospital	148.21	143.90	142.94	142.81

E. Financial Information**1. Income Statement Statistics**

	For Year Ending December 31,			
	1984	1983	1982	1981
Operating Revenues	\$ 4,117,971,000	\$ 3,917,057,000	\$ 3,539,385,000	\$ 2,406,472,000
Net Operating Revenues	\$ 3,498,644,000	\$ 3,202,988,000	\$ 2,976,912,000	\$ 2,063,637,000
Total Costs and Expenses	\$ 3,043,041,000	\$ 2,853,784,000	\$ 2,742,061,000	\$ 1,901,251,000
Income from Operations	\$ 455,603,000	\$ 349,204,000	\$ 234,851,000	\$ 162,386,000
Other Income (Net)	\$ 50,356,000	\$ 42,514,000	\$ 45,584,000	\$ 21,845,000
Income Before Income Taxes	\$ 505,959,000	\$ 319,718,000	\$ 280,435,000	\$ 184,231,000
Provision for Income Taxes	\$ 209,200,000	\$ 148,500,000	\$ 108,500,000	\$ 73,100,000
NET INCOME	\$ 296,759,000	\$ 243,218,000	\$ 171,935,000	\$ 111,131,000

2. Balance Sheet Statistics

	1984	1983	1982	1981
Current Assets	\$ 804,951,000	\$ 604,690,000	\$ 557,732,000	\$ 497,631,000
Investments and Other Assets	\$ 548,518,000	\$ 367,805,000	\$ 246,292,000	\$ 188,476,000
Net Property, Plant & Equipment	\$ 3,640,417,000	\$ 3,124,633,000	\$ 2,222,814,000	\$ 1,879,247,000
Construction in Progress and Cash Restricted for Construction	\$ 3,215,581,000	\$ 2,861,966,000	\$ 322,160,000	\$ 186,282,000
Intangible Assets	\$ 260,070,000	\$ 248,912,000	\$ 252,145,000	\$ 206,520,000
TOTAL ASSETS	\$ 4,829,128,000	\$ 4,083,373,000	\$ 3,601,143,000	\$ 2,958,156,000
Total Current Liabilities	\$ 678,249,000	\$ 469,294,000	\$ 484,020,000	\$ 367,268,000
Long-Term Debt	\$ 1,830,644,000	\$ 1,706,423,000	\$ 1,604,974,000	\$ 1,648,836,000
Total Liabilities	\$ 2,508,893,000	\$ 2,175,717,000	\$ 2,416,436,000	\$ 2,190,556,000
Shareholders' Equity	\$ 1,867,631,000	\$ 1,570,908,000	\$ 1,254,711,000	\$ 767,600,000
Total Capitalization	\$ 3,187,142,000	\$ 2,645,011,000	\$ 2,859,685,000	\$ 2,416,436,000

3. Financial Statistics and Ratios

	1984	1983	1982	1981
Working Capital	\$ 127,000,000	\$ 136,000,000	\$ 73,712,000	\$ 130,363,000
Current Ratio	1.2:1	1.3:1	1.15:1	1.35:1
Net Profit Margin	8.5 %	7.6 %	4.86 %	4.62 %
Return on Equity	17.1 %	16.9 %	22.4 %	23.7 %
Debt/Capitalization Ratio	45.5 %	45.6 %	56.1 %	68.2 %

4. Contribution to Revenues

By Type of Service	Percentage of Operating Revenues				
	1984	1983	1982	1981	1980
Room and Board and Nursery Services	32%	—	34%	34%	34%
Ancillary Services	68%	—	66%	66%	66%
<i>Total</i>	100%	100%	100%	100%	100%

By Type of Payment	Percentage of Operating Revenues				
<i>Cost-Based Reimbursement:</i>	1984	1983	1982	1981	1980
Medicare	41%	43%	41%	38%	37%
Medicaid	3%	3%	3%	5%	3%
Blue Cross	1%	1%	3%	3%	4%
Subtotal	45%	49%	47%	46%	44%
Other Sources	55%	51%	53%	54%	56%
<i>Total</i>	100%	100%	100%	100%	100%

F. Board of Directors

Name	Title
Robert Anderson	Chairman of the Board and Chief Executive Rockwell International Corporation Pittsburgh, Pennsylvania
Frank Borman	Chairman, President and Chief Executive Eastern Airlines Miami, Florida
Owen Butler	Chairman of the Board Proctor & Gamble Cincinnati, Ohio
Frank T. Cary	Chairman of the Executive Committee International Business Machines Corp. Armonk, New York
Barbara M. Clark	Civic Leader Nashville, Tennessee
John D. DeButts	Retired Chairman and Chief Ex. Officer American Telephone & Telegraph Co. New York, New York
Max M. Diamond, M.D.	Physician Houston, Texas
Winfield Dunn, D.D.S.	Senior Vice President Hospital Corporation of America; former governor of Tennessee

Name	Title
Thomas F. Frist, Jr., M.D.	President and Chief Executive Hospital Corporation of America
Thomas N. P. Johns, M.D.	Physician Richmond, Virginia
Charles J. Kane	Chairman and Chief Executive Officer Third National Corporation and The Third National Bank in Nashville Nashville, Tennessee
Donald S. McNaughton	Chairman of the Board and Chairman of the Executive Committee Hospital Corporation of America
R. Clayton McWhorten	Executive Vice President Hospital Corporation of America
Carl E. Reichardt	Chairman, President and Chief Executive Officer, Wells Fargo & Company and Wells Fargo Bank, N.A. San Francisco, California
Frank S. Royal, M.D.	Physician Richmond, Virginia
Donald V. Seibert	Retired Chairman and Chief Executive Officer J.C. Penney Company, New York, New York
Irving S. Shapiro	Partner, Skadden, Arps, Slate, Meagher & Flom Wilmington, Delaware Chairman of the Finance Committee E.I. du Pont de Nemours & Co., Inc.
David G. Williamson, Jr.	Vice President Hospital Corporation of America
Joe B. Wyatt	Chancellor, Vanderbilt University, Nashville, Tennessee

7. Hospital Management Professionals, Inc. (HMP)

Headquarters: 5200 Maryland Way, Suite 103
Brentwood, Tennessee 37027
Phone: (615)373-8830

Hospital Management Professionals, Inc., a privately held, investor-owned hospital management company, manages under contract one hospital in North Carolina, Morehead Memorial Hospital in Eden. This 133 bed general hospital is owned by a non-profit corporation and entered into a management contract with HMP in 1984.

HMP operates 30 additional hospitals in 8 states with a total of 3,900 beds. All of these hospitals are owned by nonprofit corporations. HMP, founded in 1981, employs approximately 50 people. HMP has regional offices in Chicago, Atlanta, and Wichita.

8. Humana, Inc. (Humana)

Headquarters: 1800 First National Tower
Post Office Box 1438
Louisville, Kentucky 40201
Phone: (502)561-2000

Humana, Inc. (Humana) owns and operates two hospitals in North Carolina: Humana Hospital in Greensboro and Charlotte Eye, Ear and Throat (EET) Hospital in Charlotte. Humana Hospital was built by Humana in 1977 and is a general acute-care facility. Charlotte EET is a specialty hospital purchased in 1981 from another proprietary organization. The two hospitals have a combined total of 168 beds in use.

As of December 1984, Humana owned and operated 91 hospitals in 24 states and three European countries. One of the 91 hospitals was a psychiatric facility and six, including Charlotte EET, were specialty hospitals. Humana's hospitals contained 17,152 beds at the end of fiscal 1984. Humana is the only major hospital management company that does not engage in management under contract of hospitals owned by others. Humana operates more than 50 medical office buildings adjacent to certain of its hospitals.

During 1981, Humana formed the Health Services Division to examine new methods of health care delivery. As of August 31, 1982 the division operated 45 medical care centers providing medical services to ambulatory patients. Plans for 1983 were to open as many as 55 additional centers. Humana also owns an insurance subsidiary whose principal activity is to provide a portion of Humana hospitals' professional liability coverage.

During fiscal 1983, Humana began offering indemnity health insurance and prepaid health care products under the trade name of Humana Care Plus in several markets where its hospitals are located. These products generally permit individuals to choose any physician and any hospital facility, but provide incentives to use the Company's hospitals.

As of August 31, 1984, Humana operated, under the trade name MedFirst, 68 medical care centers which maintain extended hours, in which independent physicians provide medical care to ambulatory patients. (See pages 86 ff.).

Humana employed slightly more than 42,500 persons in April 1984. Of these, approximately 68% were full-time personnel. About 18,500 licensed physicians are staff members at Humana's hospitals. As with the other hospital management companies, union activities among hospital employees are of little consequence.

During fiscal 1984, patient days of care provided dropped 3.5% to 3.4 million. Occupancy rates also declined, falling from 61.3% in 1981 to 57.1% in 1984. Company officials attributed much of the decline in both patient days and occupancy rates to the sale of high occupancy, low profit margin hospitals, the acquisition of newer hospitals with lower occupancy rates, and the declining growth rate in hospital utilization due to economic recession.

Despite the decline in patient days of care provided, corporate revenues increased from \$1.76 billion in 1983 to \$1.96 billion in 1984. Net income grew from \$160 million in 1983 to \$193 million in 1984. Humana's earnings per common share in 1984 were \$1.96 compared with \$1.63 in 1983.

Since its acquisition of American Medicorp, Inc. and its 39 hospitals in 1978, Humana has focused much of its corporate energies on strengthening its internal operations. However, by 1988, Humana plans to invest \$900 million in its existing facilities and \$1.1 billion for new capacity through construction or acquisition. Humana has pursued a policy of divesting hospitals

that “do not have the potential to be included in our strategic plan for growth” (1982 Annual Report, p. 3). At the same time, the company has sought to acquire or construct hospitals with strong growth potential. Corporate officials continue to emphasize expansion of the medical care center network as an important part of Humana’s action plan.

Humana Hospital Audubon in Louisville, KY has received worldwide attention since the summer of 1984 when it encouraged Dr. William DeVries, the only surgeon then authorized by the U.S. Food and Drug Administration to implant the Jarvik-7 artificial heart, to move from the University of Utah Medical Center in Salt Lake City. Humana has committed itself to underwrite 100 of the artificial heart implants and, since December 1984, three of the operations have been performed. Except for the Humana Hospital Audubon, it should be noted that generally Humana Hospitals do not engage in research.

Merrill Lynch sees Humana stock as an above average performer in the long term. Earnings per share are expected to grow 18% over the next five years. Humana ranks first in the hospital provider industry in terms of profit margins and return on equity.

PROFILE:

Humana, Inc.

A. Facilities Operated by Humana, as of August 31, 1982

<u>Location</u>	<u># of Hospitals</u>	<u># of Beds</u>
<i>United States</i>		
Alabama	6	983
Alaska	1	199
Arizona	2	434
California	5	938
Colorado	2	450
Florida	17	3846
Georgia	4	700
Illinois	2	556
Indiana	1	150
Kansas	2	510
Kentucky	7	1853
Lousiana	8	861
Mississippi	2	263
Nevada	1	670
North Carolina	2	198
South Carolina	1	52
Tennessee	4	472
Texas	13	2901
Utah	1	110
Virginia	3	650
Washington	1	155
West Virginia	2	201
<i>Total -</i>		
<i>U.S. Hospitals</i>	87	17,152
<i>Average # of</i>		
<i>Beds per Hospital</i>		197.15 beds

<i>International</i>		
England	2	265
Mexico	1	200
Switzerland	1	240
<i>Total -</i>		
<i>International</i>	4	705
<i>Average # of</i>		
<i>Beds per Hospital</i>		176.25 beds
<i>Total - All Humana</i>		
<i>Hospitals</i>	91	17,857

B. Humana N.C. Hospitals as of 6/85:

Owned and Operated	City	Type of Service	# of Beds
Charlotte Eye, Ear, & Throat Hospital	Charlotte	Specialty (EENT)	68
Humana Hospital Greensboro	Greensboro	General Acute Care	100

C. Utilization Statistics

	For Year Ending August 31,				
	1984	1983	1982	1981	1980
Number of Hospitals	91	90	89	81	90
Number of Licensed Beds	17,857	17,248	16,286	16,431	16,765
Average Number Beds/Hospital	196.23	191.64	182.00	202.85	186.28
Patient Days of Care	3,445,000	3,579,000	3,549,000	3,723,000	3,611,000
Hospital Percent Occupancy	57.1%	58.5%	60.0%	61.3%	58.9%

D. Staffing/Employment

	As of 8/31/84
Number of Physicians on Staff	18,500
Active Staff	9,250
Number of Employees:	
Full-time	31,500
Part-time	11,000
TOTAL	42,500
Number of Nurses (RN's & LPN's)	16,375
Number of Employees represented by unions	160 at 3 hospitals

E. Financial Information**For Year Ending****1. Income Statement**

	1984	1983	1982	1981
Total Operating Revenues	\$ 2,606,415,000	\$ 2,298,608,000	\$ 1,923,528,000	\$ 1,703,597,000
Net Revenues	\$ 1,961,189,000	\$ 1,765,123,000	\$ 1,516,311,000	\$ 1,342,906,000
Total Costs and Expenses	\$ 1,628,939,000	\$ 1,476,341,000	\$ 1,288,451,000	\$ 1,165,974,000
Income Before Income Taxes	\$ 332,250,000	\$ 288,782,000	\$ 227,860,000	\$ 176,932,000
Provision for Taxes	\$ 138,909,000	\$ 128,133,000	\$ 100,714,000	\$ 83,755,000
Net Income after Income Taxes	\$ 193,341,000	\$ 160,649,000	\$ 127,146,000	\$ 93,177,000
Earnings per Common Share	\$ 1.96	\$ 1.63	\$ 1.60	\$ 1.17

2. Balance Sheet

	1984	1983	1982	1981
Current Assets	\$ 605,306,000	\$ 521,559,000	\$ 426,520,000	\$ 388,487,000
Net Property and Equipment	\$ 1,783,308,000	\$ 1,516,361,000	\$ 1,173,688,000	\$ 978,760,000
Other Assets	\$ 189,233,000	\$ 179,880,000	\$ 144,962,000	\$ 134,985,000
Total Assets	\$ 2,577,849,000	\$ 2,217,800,000	\$ 1,745,170,000	\$ 1,502,232,000
Current Liabilities	\$ 352,227,000	\$ 304,491,000	\$ 273,795,000	\$ 274,660,000
Long-Term Debt	\$ 1,286,526,000	\$ 1,067,730,000	\$ 864,411,000	\$ 733,060,000
Total Liabilities	\$ 1,482,435,000	\$ 1,244,119,000	\$ 1,299,430,000	\$ 1,140,993,000
Stockholders Equity	\$ 743,185,000	\$ 608,634,000	\$ 445,740,000	\$ 361,239,000
Total Capitalization	\$	\$	\$ 1,310,151,000	\$ 1,094,299,000

3. Financial Statistics and Ratios

	1984	Year Ending		1981
		1983	1982	
Working Capital	\$ 2,577,847,000	\$ 217,068,000	\$ 152,725,000	\$ 113,827,000
Current Ratio	1.72:1	1.71:1	1.55:1	1.42:1
Net Profit Margin	7.4%	7.0%	6.6%	5.5%
Return on Equity of Average				
Common Stockholder	28.0%	30.4%	35.2%	33.3%
LTD/Capitalization Ratio	60.3%	58.3%	65.9%	67.0%

4. Contribution to Revenues

	1984	For Year Ending			
		1983	1982	1981	1980
By Type of Service					
Room and Board	28%	30%	—	33%	34%
Ancillary	72%	70%	—	67%	66%
<i>Total</i>	100%	100%	—	100%	100%
By Type of Payment					
Cost-Based Reimbursement:					
Medicare	42%	43%	—	40%	39%
Medicaid	4%	4%	—	5%	5%
Blue Cross	2%	2%	—	5%	5%
Charge-based Blue Cross, private insurance and self pay	52%	51%	—	50%	51%

F. Board of Directors

Name	Title
William C. Ballard, Jr.	Executive Vice President - Finance and Administration Humana, Inc.
Hilary J. Boone, Jr.	Owner-Operator, Wimbledon Farm Lexington, Kentucky
Wendell Cherry	President and Chief Operating Officer Humana, Inc.
Michael E. Gellert	Executive Director, Drexel Burnham Lambert Incorporated, Investment Bankers, New York, New York
J. David Grissom	Chairman of the Board and Chief Executive Officer, Citizens Fidelity Corporation, Louisville, Kentucky
David A. Jones	Chairman of the Board and Chief Executive Officer Humana, Inc.
Antonie T. Knoppers, M.D.	Business Consultant Summit, New Jersey
John W. Landrum	Director of Transportation Humana, Inc.
Carl F. Pollard	Executive Vice President Humana, Inc.
David C. Scott	Chairman of the Board and Chief Executive Officer, Allis-Chalmers Corporation, Milwaukee, Wisconsin
Charles L. Weisberg	Chairman of the Board and Retired President, Bass & Weisberg Realtors Louisville, Kentucky
William T. Young	Chairman of the Board, Royal Crown Companies, Atlanta, Georgia Chairman of the Board, W.T. Young Storage, Inc. Lexington, Kentucky

9. National Medical Enterprises, Inc. (NME)

Headquarters: 11620 Wilshire Boulevard
Los Angeles, California 90025
Phone: (213)479-5526

National Medical Enterprises (NME) is a relative newcomer to the North Carolina hospital scene, first becoming involved in June 1982 with the negotiation of a contract to manage the Cumberland County Hospital System, then comprised of Cape Fear Valley Hospital and Highsmith-Rainey Memorial Hospital, both in Fayetteville. In May 1983, Highsmith-Rainey left the county hospital system and became a Hospital Corporation of America facility. Cape Fear Valley Hospital, the largest North Carolina hospital affiliated with an investor-owned hospital management corporation, is still managed under contract by NME. In addition, through its July 1982 acquisition of First Washington Group [the parent company of Psychiatric Institutes of America (PIA)], NME became owner and operator of both Appalachian Hall and Highland Hospital, psychiatric hospitals in Asheville. The latter two hospitals contain 225 beds; Cape Fear Valley has 492 beds. As of August 1, 1984, NME also operated 28 long-term care facilities in North Carolina.

NME owned, operated, or managed 335 facilities and 41,671 beds as of August 1984. This total included 44 acute care hospitals, 25 psychiatric hospitals and 271 long-term care facilities. Long-term care facilities accounted for 32,788 beds, or approximately 74% of the corporate total. NME also operated 25 medical office buildings with space for 600 physicians adjacent to its hospitals or nursing facilities.

NME is a diversified corporation with a wide range of non-hospital businesses conducted through subsidiaries. Health care subsidiaries provide pulmonary, nuclear medicine and biomedical engineering services, home health care, pharmaceutical services, ambulance services, and billing and collection systems. NME also operated a hospital construction company, a building supply company and a company that designs and distributes telephone answering devices.

Between 1978 and 1984, the number of hospitals in the NME system has increased from 47 to 335. Much of this growth has come through acquisition of existing proprietary health care organizations. In 1979, NME acquired Hill Haven Corporation, increasing the number of its long-term care facilities from 11 to 110. In 1981, NME purchased Guardian Medical Services, Inc. and Health Care Management, Inc., adding 29 more long-term care facilities. NME acquired First Washington Group and its 21 psychiatric hospitals for \$150 million in cash and long-term debt in July 1982. It bought National Health Enterprises and Idak Corp, nursing home chains, for more than \$150 million in cash and assumed debt in September 1982. The latter two acquisitions added over 90 long-term care facilities to NME's holdings.

In 1982, NME had \$203 million in capital improvements, \$74 million more than in 1981. These funds were used principally in NME's acquisitions.

Since June 1, 1983, NME has acquired or developed five acute care hospitals, two substance abuse recovery centers, 50 long-term care facilities, 16 medical supply and pulmonary service companies, 12 pharmacies, one free-standing hemodialysis center, five home health agencies and several other smaller businesses.

During the fiscal year ended May 31, 1984, NME's total operating revenues were derived from its acute hospitals and primary care services, including international operations and alternative care facilities (54%), long-term care services (26%), psychiatric and substance abuse services (8%) and health products and services (12%).

NME employed slightly more than 55,000 persons at May 31, 1984; an estimated 90% were full-time personnel. The Acute Services Group employed 20,800 persons; the Long Term

Care Group employed 26,200 persons; Psychiatric and Substance Abuse, 4300; the remaining 3,800 were employed at the corporate staff level or in non-medical subsidiaries.

Occupancy rates are separated for acute care facilities versus long-term care facilities. NME's long-term care facilities experienced a 92% occupancy rate in 1984. The company's acute care facilities averaged 57% occupancy, down 4% over the previous year.

NME can be expected to continue its aggressive acquisition program for the next several years. Continued emphasis on a combination of acute-care and long-term care facilities is likely. However, NME has actively sought to develop alternative non-institutional health care programs to supplement its current offerings.

Merrill Lynch expects NME's earnings per share to grow 20% over the next five years; long-term growth is projected to be at least 20%.

PROFILE:

National Medical Enterprises (NME)

A. Facilities Owned or Leased by NME and Operated for Its Own Account, as of May 31, 1984:

State	# of Acute Care	# of Beds	# of Psych Hosp.	# of Beds	# of Long- term	# of Beds	Total Facilities	Total Beds
Alabama					3	447	3	447
Arizona			1	38	6	935	7	973
Arkansas					1	174	1	174
California	23	3367	2	192	52	5431	77	8990
Colorado			1	63	2	215	3	278
Connecticut			1	105	8	950	9	1055
Florida	6	1133	3	194	6	699	15	2026
Georgia			2	107	3	370	5	477
Idaho					8	804	8	804
Illinois	1	201			1	263	1	263
Indiana					2	353	2	353
Iowa					3	526	3	526
Kansas					3	843	3	843
Kentucky					7	916	7	916
Louisiana	5	882	1	25	1	136	7	1043
Massachusetts					47	4891	47	4891
Maryland			1	75			1	75
Michigan			1	48	3	382	4	430
Minnesota					2	296	2	296
Missouri	1	398			5	946	6	1344
Montana					7	799	7	799
Nebraska					2	321	2	321
New Jersey			1	144			1	144
New York			1	26			1	26
Nevada					5	511	5	511
New Hampshire					3	502	3	502
New Mexico					3	190	3	190
North Carolina			2	225	28	3018	30	3243
Ohio					1	174	1	174
Oklahoma					1	182	1	182
Oregon					1	110	1	110
South Carolina			1	39	1	129	2	168
Tennessee	1	190			5	558	6	748
Texas	7	1174	2	218	18	2589	27	3981
Utah					4	443	4	443
Vermont					1	160	1	160
Virginia			4	240	4	553	8	793
Washington					3	251	3	251
Washington, D.C.			1	235			1	235
Wisconsin			1	81	13	2452	14	2533
Wyoming					4	451	4	451
<i>Total</i>	44	7345	26	2055	267	32970	336	42169
<i>Average # Beds</i>		166.93		79.04		123.48		125.50

B. Facilities Managed Under Contract by NME, as of August 1, 1984

<u>Acute Care Facilities</u>	
Arizona	1
California	12
Colorado	2
Georgia	1
Idaho	1
Illinois	3
Minnesota	3
Montana	11
New Mexico	2
New York	1
North Carolina	1
Total # of Beds	4,559
Average Bed Size	119.97 Beds

C. NME N.C. Hospitals as of 6/85

<u>Contract Managed</u>	<u>City</u>	<u>Type of Service</u>	<u># of Beds</u>
Cape Fear Valley Hospital	Fayetteville	General	492

(see also p. 147 for the profile of NME's subsidiary, Psychiatric Institutes of America)

D. Utilization Statistics

	<u>Fiscal Year Ending 5/31</u>			
<u>Long-Term Care Facilities</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Average Occupancy	92%	91%	92%	89%
# of Hospitals (owned, leased, managed)	271	230	141	111
# of Beds	32,788	28,447	17,019	14,349
<u>Acute Care Facilities</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Average Occupancy	57%	61%	64.5%	62.6%
# of Hospitals (owned, leased, managed)	75	65	55	54
# of Beds	11,904	9,516	7,347	6,669

E. Staffing/Employment (as of 5/31/84)

	<u># of Employees</u>
Acute and Primary Care Services	20,800
Long-Term Care Services	26,200
Psychiatric and Substance Abuse Services	4,300
Other (including corporate staff)	3,800
TOTAL	55,100

approximately 10% are part-time employees

F. Financial Information**1. Income Statement Figure**

	For Year Ending 5/31			
	1984	1983	1982	1981
Total Revenues	\$ 2,524,000,000	\$ 2,148,000,000	\$ 1,382,695,000	\$ 1,044,118,000
Net Revenues	\$ 2,065,000,000	\$ 1,788,000,000	\$ 1,167,073,000	\$ 893,508,000
Total Operating Costs and Expenses	\$ 1,873,000,000	\$ 1,636,000,000	\$ 1,041,279,000	\$ 798,899,000
Other Income	\$ 24,000,000	\$ 18,000,000	\$ 7,443,000	\$ 43,680,000
Net Income before Taxes	\$ 216,000,000	\$ 170,000,000	\$ 133,237,000	\$ 94,679,000
Income Taxes	\$ 95,000,000	\$ 75,000,000	\$ 58,000,000	\$ 43,680,000
Net Income	\$ 121,000,000	\$ 95,000,000	\$ 75,237,000	\$ 50,999,000
Earnings Per Share of Common Stock and Equivalents	\$1.74	\$1.45	\$1.60	\$1.22

2. Balance Sheet Figures

	1984	1983	1982	1981
Total Current Assets	\$ 554,000,000	\$ 639,000,000	\$ 422,931,000	\$ 312,796,000
Total Investments and Other Assets	\$ 142,000,000	\$ 93,000,000	\$ 53,369,000	\$ 40,006,000
Net Property, Plant and Equipment	\$ 1,325,000,000	\$ 1,001,000,000	\$ 656,480,000	\$ 483,705,000
Net Intangible Assets	\$ 213,000,000	\$ 181,000,000	\$ 70,414,000	\$ 28,858,000
Total Assets	\$ 2,234,000,000	\$ 1,914,000,000	\$ 1,203,194,000	\$ 865,365,000

	1984	1983	1982	1981
Total Current Liabilities	\$ 352,000,000	\$ 271,000,000	\$ 208,306,000	\$ 164,863,000
Long-Term Debt	\$ 946,000,000	\$ 859,000,000	\$ 475,153,000	\$ 280,440,000
Total Liabilities	\$ 1,468,000,000	\$ 1,255,000,000	\$ 683,459,000	\$ 445,303,000
Preferred Stock Equity			\$ 5,141,000	\$ 5,141,000
Common Stockholder's Equity	\$ 776,000,000	\$ 659,000,000	\$ 451,849,000	\$ 372,391,000
Total Stockholder's Equity	\$ 2,234,000,000	\$ 1,194,000,000	\$ 456,990,000	\$ 377,532,000
Total Capitalization			\$ 932,143,000	\$ 657,972,000

3. Financial Statistics and Ratios

	As of 5/31			
	1984	1983	1982	1981
Working Capital	\$ 202,000,000	\$ 368,000,000	\$ 214,625,000	\$ 147,933,000
Current Ratio	1.58/1.0	2.36/1.0	2.03/1.0	1.90/1.0
Net Profit Margin	4.7%	4.2%	5.4%	4.9%
Return on Equity	17%	16.9%	18.1%	18.7%
Debt/Capitalization Ratio	1.24/1.0	1.30/1.0	1.05/1.0	78/1.0

4. Contribution to Revenues

a. By Business Segment

	1984	1983	1982	1981	1980
Acute Care Hospitals	54.0%	56.0%	60.0%	59.0%	61.0%
Long-Term Care Facilities	23.0%	23.0%	20.0%	21.0%	25.0%
International Operations	5.0%	5.0%	7.7%	10.5%	4.8%
Other Health Care Businesses	18.0%	16.0%	12.3%	9.5%	9.2%
<i>Total</i>	100 %	100 %	100 %	100 %	100 %

b. By Type of Payment

	1984	1983	1982	1981	1980	1979	1978
<i>Acute Care Hospitals</i>							
Medicare	46.0%	45.8%	42.5%	42.0%	42.1%	39.1%	35.8%
Medicaid	10.2%	10.4%	12.7%	12.7%	12.6%	13.8%	14.4%
Blue Cross *	3.5%	3.7%	4.5%	4.5%	4.1%	4.9%	5.8%
Private and Other	40.3%	40.1%	40.3%	40.8%	41.2%	42.2%	44.0%
<i>Long-Term Care Facilities</i>							
Medicare	7.2%	8.1%	12.4%	14.5%	17.1%	4.0%	4.0%
Medicaid	59.9%	60.1%	55.7%	54.5%	53.3%	69.4%	72.5%
Private and Other	32.9%	30.9%	31.9%	31.0%	29.6%	26.6%	23.5%

G. Board of Directors

Name	Title
Richard K. Eamer	Chairman and Chief Executive Officer
William S. Banowsky, Ph.D.	President, Los Angeles Chamber of Commerce
Daniel R. Bats	Senior Executive Vice President (NME)
John C. Bedrosian	Senior Executive Vice President
Leonard Cohen	President and Chief Operating Officer
Edward Egbert, M.D.	Physician
Taylor R. Jenson	Executive Vice President and Chief Financial Officer
Lloyd Johnson	President, Whitehall Convalescent Homes, Inc.
James P. Livingston	Executive Vice President, and President, Health Products and Services Group
A. J. Martinson, M. D.	Physician (Retired)
Howard E. Nachtman, M.D.	Physician (Retired), Medical Advisor Hospital Pulmonary Services
Richard L. Stever	Consultant
Peter de Wetter	Executive Vice President, International

10. Psychiatric Institutes of America (PIA)

(A subsidiary of National Medical Enterprises (NME))

Headquarters: 1010 Wisconsin Avenue, N.W.

Suite 900

Washington, D.C. 20007

Phone: (202)337-5600

Psychiatric Institutes of American (PIA), a psychiatric hospital organization, became a part of National Medical Enterprises, Inc. (NME) in 1982 when NME acquired First Washington Group, Inc., the parent corporation of PIA.

PIA owns and operates two North Carolina psychiatric hospitals: Highland Hospital (125 beds) and Appalachian Hall (100 beds), both in Asheville. PIA owns and operates a total of 31 psychiatric and rehabilitation facilities in 16 states and the District of Columbia with a total of 2,272 beds. Five hospitals are currently under construction, which will bring the total number of states to 19 and will add 314 beds to PIA's network. Four of PIA's facilities are presently being expanded.

PROFILE:

Psychiatric Institutes of America (PIA)

A. Hospitals in Operation: Domestic-Owned

Location	Number of Hospitals	Number of Beds
Arizona	1	41
California	2	185
Colorado	2	103
Connecticut	1	105
District of Columbia	1	235
Florida	3	194
Georgia	2	124
Louisiana	1	25
Maryland	2	115
Michigan	1	48
Minnesota	1	40
New Jersey	2	168
North Carolina	2	225
South Carolina	1	40
Texas	2	218
Virginia	5	300
Wisconsin	1	81

B. Hospitals Under Construction: Domestic-Owned

Location	Number of Hospitals	Number of Beds
Arkansas	1	60
Florida	1	72
Louisiana	2	92
New Hampshire	1	90

11. United Medical Corporation (UMC)

Headquarters: Atlantic Bank Center, Suite 1600
20 North Orange Avenue
Orlando, Florida 32801
Phone: (305)423-2200

United Medical Corporation (UMC), a privately held investor-owned hospital management company, owns and operates one hospital in North Carolina, Hickory Memorial Hospital in Hickory. This 64-bed general hospital was acquired by UMC from Humana, Inc. in 1979. UMC sought Certificate of Need approval from the Division of Facility Services within the N.C. Department of Human Resources to convert Hickory Memorial to a psychiatric hospital. Since the CON was denied, Hickory Memorial gradually converted its general beds to psychiatric beds and now is characterized as a psychiatric hospital.

UMC owns and operates five additional hospitals in four states. The company, founded in 1974, has a management contract with one hospital. Four of UMC's hospitals are general hospitals; the other two are psychiatric facilities. Three hundred and eight licensed beds are under UMC ownership or management.

United Medical employs approximately 600 people and has a total of 65 doctors on staff in its hospitals. UMC's six hospitals provided 51,465 patient days of care in fiscal 1982 and had a 65% composite occupancy rate.

UMC had total revenues of approximately \$33 million in fiscal 1982. Additional financial information is not publicly available.

PROFILE:

United Medical Corporation (UMC)**A. United Medical Corporation Hospitals**

6 owned hospitals located in:

Florida	South Carolina
Kentucky	Tennessee
North Carolina	

1 managed hospital in Tennessee

Types of Hospitals

General Acute Care	5 (one managed hospital)
Psychiatric	1
Acute Care/Psychiatric	1

B. UMC's North Carolina Hospital

<u>Owned and Operated</u>	<u>Location</u>	<u>Type of Service</u>	<u># of Beds</u>
Hickory Memorial Hospital	Hickory	Psychiatric	64

C. Utilization Statistics

As of August 30, 1983

Number of Hospitals	6 hospitals
Number of Beds	308 beds
Average Size (# of Beds)	51.33 beds
Employees per bed	2 employees/bed
Patients per day	141 patients/day
Patient days	51,465 patient days

Doctors on Staff:	65 Total
General Hospital	6/hospital
General/Psychiatric Hospital	6/hospital
Psychiatric Hospital	35 doctors

D. Fiscal Year 1982 Revenues \$33,000,000

Percent from Medicare and Medicaid 55.0%

E. Board of Directors

Name	Title
James E. England	President
Don Dizney	Chairman of the Board

12. SunHealth Inc.

Headquarters: 801 East Boulevard
P. O. Box 668800
Charlotte, North Carolina 28266
Phone: (704) 529-3300

SunHealth is North Carolina's largest not-for-profit hospital management corporation. SunHealth Inc., a holding company, owns several wholly-owned not-for-profit and for-profit subsidiaries. SunHealth Inc. has two wholly-owned hospital management subsidiaries that are active in North Carolina — Sun Alliance, which actually manages hospitals in the state, and SunHealth Network, which is a way in which SunHealth Inc. encourages and supports many kinds of cooperative arrangements and affiliations among strong, large voluntary hospitals.

As of May 1985, Sun Alliance managed under contract 16 North Carolina hospitals: Alamance County Hospital in Burlington, Chowan Hospital in Edenton, L. Richardson Memorial in Greensboro, Hamlet Hospital in Hamlet, Murphy Medical Center in Murphy, Granville Hospital in Oxford, Sea Level Hospital in Sea Level, Chatham Hospital in Siler City, Anson County Hospital in Wadesboro, Beaufort County Hospital in Washington, Bertie County Memorial in Windsor, L. C. Hoots Memorial in Yadkinville, Memorial Hospital of Alamance in Burlington, Martin General Hospital in Williamston, Pender Memorial Hospital in Burgaw, and Thoms Rehabilitation Center in Asheville. In addition, SunHealth owns and Sun Alliance operates Mountain Park Medical Center in Andrews. In all, these 16 general hospitals and one rehabilitation hospital have 1,531 beds in use.

In May of 1985, six North Carolina hospitals were members of the SunHealth Network, a joint venture organization of more than three dozen large voluntary referral hospitals, teaching medical centers, and hospital systems in ten states.

SunHealth Inc. represents the combined efforts of two previously separate not-for-profit organizations; Carolina Health and Hospital Services (CHHS) and the Sun Alliance (SA). CHHS was formed in 1969 as a shared service organization through the joint efforts of the North and South Carolina Hospital Associations. In 1974, CHHS began managing hospitals under contract in the two states. By September 30, 1982, CHHS was managing 23 hospitals in six states. Three hundred and fifty other hospitals and health care facilities in the Southeast were using CHHS' shared professional and technical services.

The Sun Alliance was formed in 1979 "as a joint venture organization of large voluntary hospitals in the Southeast, for the purpose of sharing programs and services geared to the particular needs of large hospitals and to jointly work toward strengthening the voluntary sector." (CHHS 1982 Annual Report, p. 7). This joint venture itself was contract managed by CHHS for the express purpose of undertaking large-hospital activities such as capital equipment group purchasing. The SA network included 30 member hospitals by the end of fiscal 1982; its shared service system reached 100 hospitals, comprising 25,000 beds.

In May 1983, CHHS and Sun Alliance merged to form SunHealth Inc., the parent holding company of several subsidiaries, each responsible for a certain function. The SunAlliance subsidiary now manages small to medium-sized hospitals. The new SunHealth Network concentrates on large-hospital joint programs and services. CHHS is now SunHealth Services Corp., a specialized hospital shared services cooperative. Separate subsidiaries for research,

development, educational operations, and contract management complete the system, which offers the following services:

- Contract management
- Management support services, management engineering and management consulting:
 - short and long range strategic planning
 - construction and renovation programs
 - productivity and staffing systems
 - quality assurance programs
 - wage and salary systems
- Research and education programs
- Plant services
 - planning, operation and maintenance
- Materials management services
 - group purchasing programs
- Biomedical equipment services
 - preventive maintenance programs
 - pre-purchase evaluations
 - safety testing programs
 - repair services
 - inservice educational programs

In June 1983, the corporation managed 25 hospitals and provided services to more than 375 facilities. Fiscal 1982 revenues totaled \$13 million with a staff of 280 employees (CHHS).

The new corporate structure is designed to provide greater flexibility in developing strategies to compete with the investor-owned corporations active in the southeastern U.S. In comments published in the June 1983 issue of *Modern Healthcare*, Sun Alliance Chairman Duane T. Houtz indicated a desire for "programmed growth and integration of small and large institutions." He also indicated a desire to expand Sun Alliance's group purchasing activities from \$50 million to \$150 million per year (p. 40). It appears that SunHealth Inc. will be an even more formidable force among multi-hospital systems active in North Carolina. The availability of a wide variety of shared services, consulting activities, and management contracts make affiliation with SunHealth Inc. a viable alternative for hospitals seeking the benefits of a multi-hospital system.

PROFILE:

SunHealth Inc.

- A. *Total number of hospitals using SunHealth's services or enrolled in its network, as of June 1983:*
More than 400 hospitals in 15 southeastern states.
- B. *Number of hospitals contract managed by SunHealth, as of June, 1983:*
25 hospitals in 5 states.
- C. *Numbers of hospitals which were members of Sun Alliance Network, as of September 31, 1982:*
30 hospitals in 10 states.
- D. *Number of hospitals using Sun Alliance's services or part of the Network, as of Summer, 1983:*
100 hospitals with 25,000 beds.
- E. *North Carolina hospitals contracted managed by Sun Alliance as of May, 1985:*

Hospital	City	Type of Hospital	# of Beds
Mountain Park Medical Center	Andrews	General, NFP	61
Thoms Rehabilitation Center	Asheville	Rehabilitation, NFP	80
Pender Memorial Hospital	Burgaw	General, Public	44
Alamance County Hospital	Burlington	General, Public	141
Memorial Hosp. of Alamance	Burlington	General, NFP	222
Chowan Hospital	Edenton	General, Public	117
L. Richardson Hospital	Greensboro	General, NFP	130
Hamlet Hospital	Hamlet	General, Public	60
Murphy Medical Center	Murphy	General, Public	170
Granville Hospital	Oxford	General, Public	68
Sea Level Hospital	Sea Level	General, NFP	76
Chatham Hospital	Siler City	General, NFP	68
Anson County Hospital	Wadesboro	General, Public	96
Beaufort County Hospital	Washington	General, Public	151
Bertie County Memorial Hospital	Windsor	General, Public	50
Martin General Hospital	Williamston	General, Public	49
L.C. Hoots Memorial Hospital	Yadkinville	General, NFP	72
<i>17 Hospitals</i>			1,531

- F. *North Carolina Hospitals which were members of SunHealth Network as of May, 1985:*

Hospital	City	Type of Hospital	# of Beds
Memorial Mission Hospital of Western N.C.	Asheville	General, NFP	472
Presbyterian Hospital	Charlotte	General, NFP	580
Durham County General Hospital	Durham	General, Public	483
Moses H. Cone Memorial Hospital	Greensboro	General, NFP	434
New Hanover Memorial Hospital	Wilmington	General, Public	482
N.C. Baptist Hospital	Winston-Salem	General, NFP	673
<i>6 Hospitals</i>			3,205

G. Financial Information - CHHS

1. Balance Sheet Items	For Year Ending	
	1982	1981
Current Assets	\$ 1,621,200	\$ 1,211,600
Net Equipment and Leasehold Improvements	\$ 882,300	\$ 890,000
Net Investment in Lease	\$ 1,100,500	\$ 565,200
Total Assets	\$ 3,604,000	\$ 2,666,800
Current Liabilities	\$ 1,527,800	\$ 1,081,200
Long-Term Debt	\$ 1,007,600	\$ 656,800
Total Liabilities	\$ 2,535,400	\$ 1,738,000
Equity	\$ 1,068,600	\$ 928,800
Total Capitalization	\$ 2,076,200	\$ 1,585,600

2. Financial Statistics and Ratios	For Year Ending	
	1982	1981
Working Capital	\$ 93,400	\$ 130,400
Current Ratio	1.06/1.0	1.12/1.0
Debt/Capitalization Ratio	48.5%	41.4%

H. Board of Trustees

Name	Title
Charles C. Boone	Chairman of the Board President, Spartanburg General Hospital, Spartanburg, S.C.
Richard P. Moses	Chairman-elect Real Estate Executive and AHA Constituency Center Director, Sumter, S.C.
Ben W. Latimer*	President CHHS Charlotte, N.C.
William L. Yates*	Secretary-Treasurer President, S.C. Hospital Association, West Columbia, S.C.
Karlo Baker	Textile Executive, Greenwood Mills, Inc. Orangeburg, S.C.
Heyward N. Dantzler	Agribusiness Representative, Southern Railway Holly Hill, S.C.
Richard W. Furst, D.B.A.	Dean of the College of Business Administration, Univ. of Kentucky, Lexington, Kentucky
Harold C. Green	Executive Director, Charlotte-Mecklenburg Hospital Authority, Charlotte, N.C.
Donald C. Hiscott	President, Southeastern General Hospital Lumberton, N.C.
Carl Horn, Jr.	Chairman of the Board and Chief Executive Officer (Retired), Duke Power Co., Charlotte, N.C.
William L. Ivey	President, Richard Memorial Hospital Columbia, S.C.
Dace W. Jones, Jr.	President, Elliott White Springs Memorial Hospital Lancaster, S.C.
Harold G. Koach	President, Forsyth County Hospital Authority, Inc. Winston-Salem, N.C.
C. Edward McCauley*	President, North Carolina Hospital Association Raleigh, N.C.
Mrs. Helen Mitchell	Agribusiness Executive Oxford, N.C.
Halsted M. Stone, M.D.	Family Practitioner Chester, S.C.
Edwin J. Walker, Jr.	Attorney-at-Law Durham, N.C.

* Ex officio

CHAPTER VII

FURTHER RESEARCH BY THE N.C. CENTER FOR PUBLIC POLICY RESEARCH

The preceding chapters have demonstrated the growing impact of the investor-owned sector within the American health industry. North Carolinians are acutely aware of the role of investor-owned hospital systems; more than 20% (38 hospitals) of the state's 164 non-federal hospitals are owned, operated, or managed by an investor-owned organization. At the same time, North Carolina has an active not-for-profit multi-hospital system offering an alternative management source to independent hospitals in the state.

In this report, the Center has looked closely at those North Carolina hospitals that have opted for affiliation with an investor-owned corporation. The Center has also profiled the 11 investor-owned and the largest not-for-profit multi-hospital systems active in the state. Finally, the Center has attempted to introduce the reader to some of the problems facing hospitals in the 1980s.

The staff of the North Carolina Center for Public Policy Research is continuing its research on the North Carolina hospital industry, reviewing Medicare/Medicaid cost reports and state licensure data and interviewing hospital and community officials

around the state. In its second report, the Center will present an analysis of the differences between investor-owned hospitals and other hospitals in the state. The report will examine the reasons underlying North Carolina hospitals' decisions to join investor-owned systems. The second report will also examine how community and hospital officials view the impact of investor-ownership on hospital care in this state.

The final report will be intended for use primarily as a guide to assist the public, county officials, and hospital officials in making decisions about affiliating with a multi-hospital system, whether for-profit or not-for-profit. It will examine in detail the political, social and economic environments in which hospitals must operate, the problems hospitals face, and the reasons that a hospital might explore alternative organizational structures. The report will describe each of the options available to a community or hospital and the pros and cons of each option. Finally, the guide will discuss the process communities and hospital officials should follow in making sound decisions regarding the future of their hospitals.

Note — The hospital industry in North Carolina is changing. One indication of this is that since the authors completed their final drafts, the N.C. Center has learned of changes in ownership and management in the following North Carolina hospitals:

- Alamance County Hospital (ACH) and Memorial Hospital of Alamance County (MHAC)** merged and are now owned by the not-for-profit Alamance Health Services Inc. MHAC had a new name — Alamance Memorial Hospital. SunHealth, Inc. continues to manage both hospitals.
- Bertie County Memorial Hospital** in Windsor, a county-owned general hospital, is now leased by the investor-owned Westworld Community Healthcare Inc. The hospital had been managed by SunAlliance up until the hospital closed in July 1985. The county reopened the hospital two months later upon entering a management contract with the investor-owned Forum Health Investors (FHI). Westworld replaced FHI in February 1986.
- CPC Cedar Springs Hospital**, a psychiatric and chemical dependency hospital for adolescents, opened October 14, 1985 in Mecklenburg County, and is owned and managed by the investor-owned Community Psychiatric Centers of Santa Anna, California.
- Cape Fear Valley Hospital** in Fayetteville, a county-owned general hospital, changed its management contract from the investor-owned National Medical Enterprises, Inc. to the not-for-profit SunHealth, Inc.
- Charter Pines Hospital** in Charlotte, a new psychiatric facility owned by Charter Medical Corporation, opened.
- Edgecombe General Hospital** in Tarboro, a general hospital owned by Hospital Corporation of America, has changed its name to Heritage Hospital and has built a new replacement facility.
- Fletcher Hospital** in Henderson County changed its name to Park Ridge Hospital. The not-for-profit Adventist Health Systems/Sunbelt Health Care Corporation continues to manage it.
- Gordon Crowell Hospital** in Lincolnton, owned by American Medical International, closed.
- Hugh Chatham Memorial Hospital** in Elkin, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Huntersville Hospital** in Mecklenburg County, a county-owned general hospital, closed.
- L. Richardson Memorial Hospital** in Greensboro, a not-for-profit hospital, changed its management contract from the not-for-profit SunAlliance to Hospital Corporation of America.
- Lowrance Memorial Hospital** in Mooresville was purchased from Iredell County by the investor-owned Hospital Management Associates. The general hospital had been managed under contract by Hospital Corporation of America.
- Rutherford Hospital** in Rutherfordton, a not-for-profit hospital, entered into a management contract with Hospital Management Professionals.
- Warren General Hospital** in Warrenton, a county-owned general hospital, closed.
- Wayne County Memorial Hospital** in Goldsboro went from county-owned and operated status to a not-for-profit corporation-owned and operated status. On October 1, 1985, the hospital officially reorganized into the Wayne Memorial Hospital, Inc.

Changes in the text and tables have not been made to reflect these changes. These changes will be reflected in subsequent research and published reports.

— Editor

APPENDICES

Appendix A Brief Histories of Investor-Owned Hospitals in North Carolina

Appendix B Profiles of Investor-Owned Hospitals in North Carolina

Appendix C List of Diagnosis Related Groups

APPENDIX A

BRIEF HISTORIES OF INVESTOR-OWNED HOSPITALS IN NORTH CAROLINA

The following brief descriptions and histories of the North Carolina hospitals owned, leased, or managed by investor-owned companies are arranged by their location. Each Health Systems Agency region is listed, beginning with HSA I in the western part of the state. Those counties in that region that have hospitals with investor-owned affiliations follow in alphabetical order.

HSA I

Ashe County

Ashe Memorial Hospital (Jefferson). Ashe Memorial Hospital is a not-for-profit general hospital managed under contract by Hospital Corporation of America (HCA) since 1981. Ashe Memorial is a 76-bed facility and is the only hospital in Ashe County.

Buncombe County

Appalachian Hall (Asheville). Appalachian Hall was built in the early 1900's for use as an inn. It operated in that capacity until 1931, except for a four-year period from 1917 to 1921 when it served as a temporary army hospital. In 1931, Appalachian Hall became an investor-owned psychiatric hospital and, except for a brief transformation into a U.S. Navy hospital during World War II, it has continued as such through two ownership changes. Until 1979, Appalachian Hall was owned and operated by an independent investor-owned corporation. Owners of the 100-bed hospital signed a management contract with Psychiatric Institutes of America (PIA) in 1979. PIA provided management service through February 1981 when it purchased the hospital. National Medical Enterprises (NME) acquired PIA in 1982.

Highland Hospital (Asheville). Highland Hospital was opened by Dr. Robert Carroll as a proprietary hospital in 1904. At Dr. Carroll's death in 1939, the facility was donated to the Duke Foundation. In July 1981 the Duke Foundation sold the hospital to Highland Psychiatric Associates, a proprietary partnership comprised of six physicians, the Montford Investment Group, and Psychiatric Institutes of America (PIA). National Medical Enterprises acquired PIA in 1982.

Other hospitals in Buncombe County include Memorial Mission Hospital and St. Joseph's Hospital, both not-for-profit facilities located in

Asheville; Thoms Rehabilitation Hospital, a not-for-profit specialty hospital also in Asheville; and the state-owned Alcoholic Rehabilitation Center in Black Mountain.

Caldwell County

Blackwelder Hospital (Lenoir). Blackwelder Hospital is a general hospital opened in 1934 by Dr. Blackwelder. In 1977 ownership of the hospital was transferred from the Blackwelder family to the Blackwelder Foundation. In February of 1985, the Foundation sold the hospital to Healthcare Management Corporation, a subsidiary of Basic American Medical, Inc.

The not-for-profit owned and operated Caldwell Memorial Hospital is the only other hospital in Caldwell County. Like Blackwelder, it is an acute care general hospital.

Catawba County

Frye Regional Medical Center (Hickory). Formerly known as Glenn R. Frye Memorial Hospital, Frye Regional Medical Center, a 218-bed general hospital owned and operated by American Medical International (AMI), has been a proprietary hospital since it opened in 1912 as the Richard Baker Hospital. AMI acquired the hospital from CHAMCO, an investor-owned hospital corporation.

Hickory Memorial Hospital (Hickory). Hickory Memorial Hospital opened in 1935 and was operated as a doctors' hospital until 1964 when it was purchased by Extenda-Care. In 1972, Humana, Inc. acquired the hospital and operated it until 1979 when the facility was sold to United Medical Corporation (UMC), the present owner. Extenda-Care, Humana, and UMC are investor-owned hospital corporations. Hickory Memorial Hospital has gradually converted its beds so that it now is totally a psychiatric facility.

County-owned and operated Catawba Memorial

Hospital, also located in Hickory, is the only other hospital in Catawba County. Like Frye Regional Medical Center, Catawba Memorial Hospital is a general, acute-care hospital.

Macon County

Angel Community Hospital (Franklin). Angel Community Hospital, an 81-bed general hospital, was built in 1926 as a doctor-owned proprietary hospital. In 1965 Macon County purchased the facility. The county entered into a management contract with Resources Management Associates, now The Delta Group, in July 1981. After the contract expired in June 1983, the hospital signed a management contract with Hospital Corporation of America, the most active investor-owned multi-hospital corporation in the state.

Highland-Cashiers Hospital, in Highlands, a general hospital owned and operated by a not-for-profit corporation, is Macon County's only other hospital.

McDowell County

The McDowell Hospital (Marion). The McDowell Hospital, formerly Marion General Hospital, has been managed under contract by The Delta Group since January 1982. The 62-bed general hospital is owned by a not-for-profit corporation. A new replacement facility opened in 1984. The McDowell Hospital is the county's only hospital.

Mitchell County

Spruce Pine Community Hospital (Spruce Pine). Spruce Pine Hospital, formerly Blue Ridge Hospital, is the only hospital in Mitchell County. It is an 88-bed facility managed under contract by Hospital Corporation of America (HCA). Spruce Pine Hospital is a general hospital owned by a not-for-profit corporation. HCA began its affiliation with the former Blue Ridge Hospital in 1983. Spruce Pine Hospital and Burnsville Hospital make up the Blue Ridge Hospital System.

Yancey County

Burnsville Hospital (Burnsville). Burnsville Hospital in Yancey County is the second hospital in the Blue Ridge System along with Spruce Pine Hospital. Burnsville Hospital is a county-owned hospital opened in 1976 that is managed by the Hospital Corporation of America (HCA). It is a general hospital with 24 beds.

HSA II

Forsyth County

Charter Mandala Center (Winston-Salem). Charter Mandala Center was founded in 1973 by Dr. Richard Boren as a doctor-owned proprietary psychiatric hospital. In July 1981 Dr. Boren's heirs sold the 75-bed facility to Charter Medical Corporation, the present owner and operator.

Medical Park Hospital (Winston-Salem). Medical Park Hospital, a 136-bed general hospital, is one of the two independently owned investor-owned hospitals operating in North Carolina. The hospital was opened in June 1971 and is a proprietary limited partnership. In late 1984 Medical Park Hospital entered into a management contract with Hospital Corporation of America.

Forsyth County has four other hospitals, all in Winston-Salem. They are: North Carolina Baptist Hospital, a not-for-profit general hospital; Amos Cottage Rehabilitation Hospital, a not-for-profit facility; Forsyth Memorial Hospital, a not-for-profit general hospital; and Forsyth/Stokes Mental Health Center, a publicly owned psychiatric hospital.

Guilford County

Charter Hills Hospital (Greensboro). Charter Hills Hospital is a 100-bed psychiatric hospital opened in July 1981. The facility was built by its present owner and operator, Charter Medical Corporation.

Humana Hospital (Greensboro). Humana Hospital, formerly Greensboro Hospital, was opened in July 1977 by Humana, Inc. The facility is a 130-bed general hospital.

In addition to Charter Hills Hospital and Humana Hospital, Guilford County has five hospitals owned and operated by not-for-profit corporations. Wesley Long Community Hospital, Moses H. Cone Memorial Hospital, and L. Richardson Memorial Hospital, all in Greensboro, and High Point Memorial Hospital in High Point are general hospitals. Fellowship Hall, also in Greensboro, is an alcoholic rehabilitation center.

Rockingham County

Morehead Memorial Hospital (Eden). Morehead Memorial Hospital, owned by a not-for-profit corporation, entered into a management contract with Hospital Management Professionals in early 1984. The 133-bed facility is one of two not-for-profit general hospitals in Rockingham County. The other is Annie Penn Memorial Hospital in Reidsville.

HSA III

Iredell County

Davis Hospital (Statesville). Davis Hospital was founded in 1925 by Dr. James Davis as a doctor-owned proprietary facility. In 1937 the hospital was incorporated as a not-for-profit corporation. In October 1981 Davis Hospital entered into a management contract with Hospital Corporation of America (HCA). HCA purchased the 167-bed general hospital in May 1983 and built a replacement facility that opened in 1984.

Lowrance Hospital (Mooresville). Lowrance Hospital is owned by Iredell County and, since 1983, managed by Hospital Corporation of America (HCA). The HCA management contract represents the first affiliation with a investor-owned corporation for the 116-bed hospital.

Iredell County is the location of one other hospital, Iredell Memorial Hospital in Statesville. A general hospital, Iredell Memorial is owned by Iredell County and operated by a not-for-profit corporation.

Lincoln County

Gordon Crowell Memorial Hospital (Lincolnton). Gordon Crowell Memorial Hospital is a 93-bed general hospital owned and operated by American Medical International (AMI). The facility opened in 1907 as Lincoln Hospital, a doctor-owned proprietary hospital. The present name was adopted in 1935. In 1969, CHAMCO, an investor-owned hospital management company acquired the hospital. CHAMCO sold the facility to AMI in 1972.

Gordon Crowell Memorial is one of two general hospitals in Lincoln County. The other, Lincoln County Hospital, also in Lincolnton, is a county-owned facility managed by a not-for-profit corporation.

Mecklenburg County

Charlotte EET Hospital (Charlotte). Charlotte EET Hospital, a 68-bed hospital specializing in eye, ear, nose, and throat disorders, has been a proprietary hospital since it was opened as a doctor-owned facility in 1923. The hospital's present owner, Humana, Inc., purchased the facility in 1981.

Orthopaedic Hospital (Charlotte). The physical plant now housing Orthopaedic Hospital was opened in 1971 as a proprietary nursing home, owned and operated by Medicenters of America, an investor-owned nursing home company. The facility was converted to an orthopedic hospital in 1977 following the acquisition of Medicenters by Hill Haven, Inc. After managing the hospital under contract for two

years, Hospital Affiliates International entered an agreement with Hill Haven, Inc. whereby it would lease the physical facility and continue to manage the hospital. Hill Haven was acquired by American Medical International (AMI) in 1981 and, in 1982, Hospital Corporation of America purchased Hospital Affiliates International. Orthopaedic Hospital is now owned by HCA.

Eight other hospitals, five general and three specialty facilities, are located in Mecklenburg County. Charlotte Memorial Hospital and University Memorial Hospital in Charlotte, and Huntersville Hospital in Huntersville are public hospitals; Mercy Hospital and Presbyterian Hospital are both not-for-profit general hospitals in Charlotte. The three specialty facilities are Charlotte Treatment Center, a not-for-profit alcoholic rehabilitation center; Mecklenburg County Mental Hospital, a county-owned psychiatric facility; and Charlotte Rehabilitation Hospital, a public hospital specializing in physical rehabilitation. All three are located in Charlotte.

HSA IV

Durham County

McPherson Hospital (Durham). McPherson Hospital, with 32 beds, is one of the smallest proprietary hospitals in North Carolina. Built in 1926, it always has been owned and operated by staff physicians as an independent eye, ear, nose and throat hospital.

McPherson Hospital is one of four nonfederal hospitals in Durham County. The others, all located in Durham, are Duke University Hospital, a not-for-profit general hospital; Durham County General Hospital, owned by Durham County and operated by a not-for-profit corporation; Lenox Baker Children's Hospital, a state-owned children's rehabilitation hospital.

Franklin County

Franklin Memorial Hospital (Louisburg). Franklin Memorial Hospital is a 76-bed general hospital owned by Franklin County. In June 1983, county officials signed a management contract with Hospital Corporation of America. Franklin Memorial Hospital is the only hospital in Franklin County.

Johnston County

Johnston Memorial Hospital (Smithfield). Johnston County's only hospital, Johnston Memorial Hospital, began a three-year management contract

with Hospital Corporation of America in February 1983. Opened in 1951, the facility is a 180-bed general hospital.

Lee County

Central Carolina Hospital (Sanford). Opened in 1930 as Lee County Hospital, Central Carolina Hospital is one of only three North Carolina public hospitals that have been acquired by an investor-owned corporation. In June 1980 American Medical International (AMI) leased the original physical facility and took over operational control. The present facility, built by AMI and opened in 1981, is owned and operated exclusively by AMI. Central Carolina Hospital is a 142-bed general hospital and is the only hospital in Lee County.

Person County

Person County Memorial Hospital (Roxboro). Person County Memorial Hospital has been owned by an not-for-profit corporation since it opened in 1950. The 77-bed general hospital has been managed under contract by Hospital Corporation of America since 1981. Person County Memorial Hospital is the only hospital in Person County.

Wake County

Charter Northridge Hospital (Raleigh). Charter Northridge Hospital is a 66-bed psychiatric hospital devoted exclusively to the treatment of chemical dependencies. It was built in 1984 and is owned and operated by Charter Medical Corporation.

Holly Hill Hospital (Raleigh). Holly Hill is a 108-bed psychiatric hospital originally built and owned by an independent proprietary corporation comprised of five staff physicians. After the facility opened in 1978, the owners immediately entered into a management agreement with Hospital Associates International (HAI). When Hospital Corporation of America (HCA) acquired HAI in 1981, HCA assumed the management contract, purchased the business and leased the hospital's assets. The staff physicians remained as owners of the physical plant until 1984 when HCA obtained complete ownership of the facility.

Raleigh Community Hospital (Raleigh). Raleigh Community Hospital was opened in the early 1950's as Mary Elizabeth Hospital, an independent, doctor-owned hospital. In the early 1970's, Charter Medical Corporation (CMC) acquired the facility. Hospital Corporation of America purchased the hospital from CMC in 1977 and moved the operation to a newly constructed building in 1978, at which time the present name was adopted. Raleigh

Community Hospital is a 140-bed general hospital.

Charter Northridge Hospital, Holly Hill Hospital, and Raleigh Community Hospital are three of twelve hospitals in Wake County. Rex Hospital in Raleigh is a not-for-profit general acute care hospital. Five facilities — Eastern Wake Hospital in Zebulon, Northern Wake Hospital in Wake Forest, Southern Wake Hospital in Fuquay-Varina, Western Wake Hospital in Apex, and Wake County Medical Center in Raleigh — are county-owned general hospitals operated by a public, multi-hospital system. Dorothea Dix Hospital is a state-owned psychiatric hospital and Wake County Alcohol Treatment Center is a alcoholic rehabilitation hospital owned and operated by the county. Both are located in Raleigh as is Central Prison Hospital, also a state-owned facility.

HSA V

Brunswick County

The Brunswick Hospital (Supply). The Brunswick Hospital was built in 1977 by Brunswick County. In 1981 county officials signed a management contract with Hospital Corporation of America (HCA) for the facility. In 1984 HCA leased the facility and now has total operational control. One of two hospitals in the county, The Brunswick Hospital is a 58-bed general hospital. The county's other hospital, J. Arthur Doshier Memorial Hospital, is owned and operated by Southport Township.

Cumberland County

Cape Fear Valley Hospital (Fayetteville). Cumberland County opened Cape Fear Valley Hospital in 1956. The 492-bed general hospital is owned by the county; however, in 1982 the Cumberland County Hospital System entered into a management contract with National Medical Enterprises for Cape Fear Valley Hospital. This facility is the largest North Carolina hospital affiliated with an investor-owned corporation.

Highsmith-Rainey Memorial Hospital (Fayetteville). Built in 1901, Highsmith-Rainey Memorial Hospital was North Carolina's first proprietary hospital. In 1963 the facility was sold to Cumberland County which then formed the Cumberland County Hospital System to manage the hospital. Hospital Corporation of America acquired the operations of Highsmith-Rainey Memorial Hospital in 1982 and assumed exclusive ownership of the hospital in 1983 when it opened a newly constructed 95-bed replacement facility.

HSA Cumberland Hospital (Fayetteville). In

November 1976 this facility was converted from a nursing home into a independent proprietary psychiatric hospital. The 154-bed facility first became part of an investor-owned multi-hospital system in 1981 when American Health Services invested in the independent corporation. In 1982 the corporation was reorganized to form Horizon Health Group; Cumberland Psychiatric Hospital (the former name of HSA Cumberland Hospital) was the only operating facility within the system. In late 1983 the hospital was acquired from the financially troubled Horizon Health Group by Healthcare Systems of America (HSA).

Life Center of Fayetteville (Fayetteville). Life Center of Fayetteville is a 34-bed hospital specializing in the treatment of chemical dependencies. It was opened in 1984 by its owner and operator, Healthcare Systems of America.

Cape Fear Valley Hospital, Highsmith-Rainey Memorial Hospital, HSA Cumberland Hospital and Life Center of Fayetteville are the only four non-federal hospitals in Cumberland County.

New Hanover County

Life Center of Wilmington (Wilmington). Life Center of Wilmington is a 27-bed facility devoted exclusively to the treatment of chemical dependencies. The hospital, which opened in 1984, is owned and operated by Healthcare Systems of America.

There are two other facilities in New Hanover County, both general hospitals. These facilities are: New Hanover Memorial Hospital, a county-owned hospital in Wilmington, and Cape Fear Memorial Hospital, a not-for-profit hospital in Wilmington; both are general acute care facilities.

HSA VI

Edgecombe County

Edgecombe General Hospital (Tarboro). Edgecombe General Hospital is a 127-bed facility built in 1901 and initially operated as a community not-for-profit hospital. Edgecombe County acquired the hospital in 1959 and sold it in 1982 to Hospital Corporation of America (HCA). HCA is currently constructing a replacement facility. Edgecombe General Hospital is the county's only hospital.

Nash County

Community Hospital of Rocky Mount (Rocky Mount). This 49-bed general hospital, formerly Rocky Mount Sanitorium, opened in 1913 as a doctor-owned proprietary hospital. The hospital's owners entered into a management contract with Brookwood

Health Services, an investor-owned hospital corporation, in 1977 and, in 1980, sold a majority interest in the hospital to Brookwood. In 1980 Brookwood moved the hospital's operations to a newly built facility. American Medical International (AMI) acquired Brookwood in 1981 and, as part of the purchase, obtained a majority interest in the Community Hospital. In addition to holding its majority share, AMI manages the facility. The only other hospital in Nash County is Nash County General Hospital, a county-owned facility also in Rocky Mount.

Onslow County

HSA Brynn Marr Hospital (Jacksonville). HSA Brynn Marr Hospital is a new 76-bed psychiatric facility owned and operated by Healthcare Services of America. HSA Brynn Marr Hospital opened in 1984. Life Center of Jacksonville (Jacksonville).

Life Center of Jacksonville is a 47-bed facility specializing in the treatment of chemical dependencies. The hospital was opened in 1984 and is owned and operated by Healthcare Services of America.

The only other hospital in Onslow County is Onslow Memorial Hospital, a general hospital owned by the county and operated by a hospital authority.

APPENDIX B

Profiles of Investor-Owned Hospitals in North Carolina

The following are profiles of North Carolina hospitals that are owned, leased, or managed by investor-owned companies. The information in the profiles has been taken from the 1982 and 1983 licensure reports submitted by each hospital to the Division of Facility Services within the North Carolina Department of Human Resources. Supplemental information has been provided by individual hospitals in response to inquiries from the North Carolina Center for Public Policy Research. The profiles are arranged alphabetically by hospital name.

ANGEL COMMUNITY HOSPITAL

Address: P. O. Box 1209
Riverview
Franklin, NC 28734

Phone: (704) 524-8411
County: Macon
HSA: 1
Administrative/Chief Executive:
Hugh R. White

Type of Hospital: General
Owner: Angel Community Hospital, Inc. (a nonprofit organization)
Operator: Hospital Corporation of America
Number of Beds in Use: 81

Services Offered (10/1/82 - 9/30/83)

Inhouse Services	Services Contracted For
Abortion (Inpatient)	None
Blood Bank	
Cardiac Rehabilitation Program	
Chemotherapy	
Clinical Psychology Services	
Dental Services	
Histopathology Laboratory	
Home Health Care Unit	
Hospital Auxiliary	
Part-Time Pharmacy	
Postoperative Recovery Room	
Psychiatric Emergency Services	
Rehabilitation (Outpatient)	
Social Work Department	

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	95	60
Number of FTE Employees:	191	183
Number of Physicians and Dentists:	23	18

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Emergency Medicine	2	2
General/Family Practice	4	4
General Surgery	1	1
Internal Medicine	2	2
Obstetrics/Gynecology	2	2
Orthopedics	-	1
Pathology	1	1
Pediatrics	2	1
Psychiatry (Not Neurology)	3	2
Radiology	1	1
Urology	-	1
General Dentistry	4	-

Expenditures**(10/1/81 - 9/30/82) (10/1/82 - 9/30/83)**

Payroll:	\$ 2,111,013	\$ 234,177
Nonpayroll:	2,546,182	71,964
TOTAL	\$ 4,657,195	\$ 3,006,141

Utilization Statistics**(10/1/81 - 9/30/82)****(10/1/82 - 9/30/83)**

	Number	Percent	Number	Percent
Admissions:	2,722		3,010	
Discharges (excluding newborns):				
Patients under 14 years	118	4.3 %	327	10.2%
Patients 14-64 years	1,603	58.9 %	1,744	54.6%
Patients over 64 years	1,001	36.8 %	1,125	35.2%
Total Discharges	2,722	100.0 %	3,196	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	241	1.4 %	851	4.4%
Patients 14-64 years	9,175	52.6 %	9,861	50.7%
Patients over 64 years	8,034	46.0 %	8,749	44.9%
Total Inpatient Days of Care	17,450	100.0 %	19,461	100.0%
Outpatient Visits:	5,774		5,668	
Average Length of Stay (Days)	6.41		6.3	
Average Daily Census(Inpatients/Day)	48.0		52.0	
Percent of Occupancy		59.02%		64.03%
Employees Per Patient Day	3.9		3.5	

APPALACHIAN HALL

Address: P.O. Box 5534
Caledonia Road
Asheville, NC 28813

Phone: (704) 253-3681
County: Buncombe
HSA: 1
Administrative/Chief Executive:
Jerry W. Tarrents, Administrator

Type of Hospital: Psychiatric
Owner/Operator: Psychiatric Institutes of America, a subsidiary of
National Medical Enterprises
Number of Beds in Use: 100

Services Offered (10/1/82 - 9/30/83)

Inhouse Service
Alcohol Detoxification Unit
Clinical Psychology Services
Occupational Therapy Services
Full-Time Pharmacy
Psychiatric Emergency Services
Psychiatric Outpatient Unit
Social Work Department

Services Contracted For
Dental Services
Podiatric Services

Employees and Medical Staff

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Number of Administrators:
Number of Nurses:
Number of FTE Employees:
Number of Physicians and Dentists:

2
30
161
6

1
29
158
4

Medical or Dental Specialty (Number of Physicians)

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Psychiatry (not neurology)

6

4

Expenditures

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Payroll:
Nonpayroll:
TOTAL

\$ 1,898,570
2,223,655
\$ 4,122,225

\$ 2,903,056
3,362,197
\$ 6,265,253

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	653		700	
Discharges (excluding newborns):				
Patients under 14 years	0	0	6	0.8%
Patients 14-64 years	511	76.5%	548	78.0%
Patients over 64 years	157	23.5%	149	21.2%
Total Discharges	668	100.0%	703	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	0	0	255	0.9%
Patients 14-64 years	25,311	76.6%	22,435	77.9%
Patients over 64 years	7,751	23.4%	6,119	21.2%
Total Discharges	33,062	100.0%	28,809	100.0%
Outpatient Visits:	1,200		1,967	
Average Length of Stay (Days)	49.49		40.98	
Average Daily Census (Inpatients/Day)	69.0		73.0	
Percent of Occupancy:		90.58%		78.93%
Employees Per Patient Day	1.8		2.0	

ASHE MEMORIAL HOSPITAL

Address: P. O. Box 8
Highway 221 South
Jefferson, NC 28640

Phone: (919) 246-7101
County: Ashe
HSA: 1
Administrative/Chief Executive:
Ray E. Hill, Jr.

Type of Hospital: General
Owner: Ashe Memorial Hospital, Inc. (a nonprofit corporation)
Operator: Hospital Corporation of America
Number of Beds in Use: 76

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Blood Bank
Hospital Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room

Services Contracted For
Histopathology

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	46	42
Number of FTE Employees:	154	131
Number of Physicians and Dentists:	10	11

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
General/Family Practice	7	7
General Surgery	2	2
Pediatrics	1	1
Radiology	-	1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 1,529,704	\$ 1,727,846
Nonpayroll:	2,290,867	2,440,586
TOTAL	\$ 3,820,571	\$ 4,168,432

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	2,587		2,366	
Discharges (excluding newborns):				
Patients under 14 years	144	5.6 %	222	8.9%
Patients 14-64 years	1,386	53.6 %	1,156	46.5%
Patients over 64 years	1,057	40.8 %	1,109	44.6%
Total Discharges	2,587	100.0 %	2,487	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	341	2.1 %	622	3.9%
Patients 14-64 years	6,540	39.8 %	5,346	33.1%
Patients over 64 years	9,534	58.2 %	10,171	63.0%
Total Inpatient Days of Care	16,424	100.0 %	16,139	100.0%
Outpatient Visits:	12,819		7,441	
Average Length of Stay (Days)	6.35		6.64	
Average Daily Census(Inpatients/Day)	45.0		43.0	
Percent of Occupancy:		59.2%		57.15%
Employees Per Patient Day	3.42		3.00	

NOTE: Ashe Memorial Hospital's first investor-owned connection came in January of 1982 when it signed a management contract with Hospital Corporation of America. This was in the middle of the year for which much of the above information was reported.

BLACKWELDER MEMORIAL

Address: 111 Boundary Street, S.W.
Lenoir, NC 28645

Phone: (704) 754-3451
County: Caldwell
HSA: 1
Administrative/Chief Executive:
Cecil R. Hayes

Type of Hospital: General
Owner/Operator: Healthcare Management Corporation
Number of Beds in Use: 31

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Blood Bank

Services Contracted For
None

Employees and Medical Staff

(10/1/82 - 9/30/83)

Number of Administrators:
Number of Nurses:
Number of FTE Employees:
Number of Physicians and Dentists:

1
16
52
18

Medical or Dental Specialty (Number of Physicians)

(10/1/82 - 9/30/83)

General-Family Practice
General Surgery
Internal Medicine
Pathology
Radiology

10
1
1
3
3

Expenditures

(10/1/82 - 9/30/83)

Payroll:
Nonpayroll:
TOTAL

\$ 609,421
777,970
\$1,387,391

THE BRUNSWICK HOSPITAL

Address: P.O. Box 139
U.S. Highway 17
Supply, NC 28462

Phone: (919) 754-8121
County: Brunswick
HSA: 5
Administrative/Chief Executive:
Charles E. Sons, Jr.

Type of Hospital: General
Owner: Brunswick County Hospital Authority
Operator: Hospital Corporation of America (a long-term lease)
Number of Beds in Use: 60

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Blood Bank
Hospital Auxiliary
Outpatient Ambulatory Surgery
Pharmacy Full-Time
Postoperative Recovery Room
Social Work Department

Services Contracted For
CAT Scan
Histopathology Laboratory
Hospice Services

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	22	32
Number of FTE Employees:	82	94
Number of Physicians and Dentists:	8	8

<i>Medical or Dental Specialty Number of Physicians</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Emergency Medicine	3	3
General Family Practice	-	1
General Surgery	2	1
Obstetrics/Gynecology	1	1
Pediatrics	1	1
Radiology	1	1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 1,252,806	\$ 1,295,971
Nonpayroll:	1,707,691	1,943,959
Total	\$ 2,960,497	\$ 3,239,930

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	1,350		1,203	
Discharges (excluding newborns):				
Patients under 14 years	54	4.0%	94	7.6%
Patients 14-64 years	857	64.0%	751	60.4%
Patients over 64 years	428	32.0%	398	32.0%
Total Discharges	1,339	100.0%	1,243	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	219	2.5%	328	3.9%
Patients 14-64 years	4,609	53.1%	4,135	49.2%
Patients over 64 years	3,860	44.4%	3,948	46.9%
Total Inpatient Days of Care	8,688	100.0%	8,411	100.0%
Outpatient Visits:	6,177		6,821	
Average Length of Stay (Days)	5.40		6.86	
Average Daily Census (Inpatients/Day)	25.0		24.0	
Percent of Occupancy		39.67%		38.07%
Employees Per Patient Day	3.4		4.10	

Note: The hospital's fiscal year changed from July 1 through June 30 to a calendar year in January 1985.

BURNSVILLE HOSPITAL

Address: 326 Pensacola Road
Burnsville, NC 28714

Phone: (704) 682-6136
County: Yancey
HSA: 1
Administrative/Chief Executive:
David W. Spangler

Type of Hospital: General
Owner/Operator: Hospital Corporation of America
Number of Beds in Use: 24

Burnsville Hospital, along with Spruce Pine Hospital, is a member of the Blue Ridge Hospital Systems. Separate statistical information is not available. See the Spruce Pine Hospital listing for the combined statistics of Burnsville Hospital and Spruce Pine Hospital.

CAPE FEAR VALLEY MEDICAL CENTER

Address: 1638 Owen Drive
Fayetteville, NC 28302

Phone: (919) 323-6151
County: Cumberland
HSA: 5
Administrative/Chief Executive:
James R. Shafer

Type of Hospital: General
Owner: Cumberland County
Operator: National Medical Enterprises
Number of Beds in Use: 492

Services Offered (10/1/82 - 9/30/83)

Inhouse Services	Services Contracted For
Abortion (Inpatient)	None
Blood Bank	
Cardiac Rehabilitation Program	
CAT Scan	
Chemotherapy	
Clinical Psychology Services	
Histopathology Laboratory	
Hospital Auxiliary	
Occupational Therapy Unit	
Outpatient Ambulatory Surgery	
Paramedical Training Program	
Full-Time Pharmacy	
Postoperative Recovery Room	
Premature Nursery Rehabilitation (Outpatient)	
Speech Therapy	
Social Work Department	

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	3	-
Number of Nurses:	470	506
Number of FTE Employees:	1,533	1,511
Number of Physicians and Dentists:	155	121

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Anesthesiology	4	4
Cardiology	-	2
Dermatology	1	1
Eye, Ear, Nose and Throat	2	2
Emergency Medicine	4	4
General/Family Practice	18	12
General Surgery	10	8
Internal Medicine	27	17
Neurosurgery	3	3

Medical or Dental Specialty
(Number of Physicians)

	(10/1/81 - 9/30/82)	(10/1/82 - 9/30/83)
Obstetrics/Gynecology	21	14
Ophthalmology	6	5
Orthopedics	6	5
Otolaryngology	4	4
Pathology	5	4
Pediatrics	13	13
Plastic Surgery	2	2
Psychiatry (Not Neurology)	7	6
Neurology (Internal Medicine)	-	3
Radiology	7	6
Thoracic Surgery	-	1
Urology	5	4
Other Physicians	1	-
General Dentistry	5	-
Oral Surgery	4	1

Expenditures

	(10/1/81 - 9/30/82)	(10/1/82 - 9/30/83)
Payroll:	\$ 20,181,026	\$ 22,117,832
Nonpayroll:	18,375,435	22,296,114
Total	\$ 38,556,461	\$ 44,413,946

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	21,041		20,148	
Discharges (excluding newborns):				
Patients under 14 years	2,424	11.5 %	6,615	26.2 %
Patients 14-64 years	15,447	73.3 %	15,447	61.1 %
Patients over 64 years	3,203	15.2 %	3,202	12.7 %
Total Discharges	21,074	100.0 %	25,264	100.0 %
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	9,293	6.4 %	25,211	15.7 %
Patients 14-64 years	96,732	66.8 %	96,735	60.1 %
Patients over 64 years	38,881	26.8 %	38,875	24.2 %
Total Inpatient Days of Care	144,906	100.0 %	160,821	100.0 %
Outpatient Visits:	62,921		65,527	
Average Length of Stay (Days)	6.88		6.88	
Average Daily Census (Inpatients/Day)	397.0		398.0	
Percent of Occupancy		80.69%		80.72%
Employees Per Patient Day	3.5		3.4	

CENTRAL CAROLINA HOSPITAL

Address: 1135 Carthage Street
Sanford, NC 27330

Phone: (919) 774-4100
County: Lee
HSA: 4
Administrative/Chief Executive:
G. Phillip Shaw

Type of Hospital: General
Owner/Operator: American Medical International
Number of Beds in Use: 142

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Abortion (Inpatient)
Abortion (Outpatient)
Blood Bank
Histopathology Laboratory
Hospital Auxiliary
Occupational Therapy Unit
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room
Social Work Department
Speech Therapy

Services Contracted For
Computerized Axial Tomography

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	2
Number of Nurses:	133	13
Number of FTE Employees:	313	299
Number of Physicians and Dentists:	41	44

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Anesthesiology	1	1
Dermatology	1	1
Emergency Medicine	3	2
General/Family Practice	13	15
General Surgery	3	3
Internal Medical	8	8
Obstetric/Gynecology	2	3
Ophthalmology	1	1
Orthopedics	-	1
Otolaryngology	-	1
Pathology	1	1
Pediatrics	4	4
Radiology	2	2
Urology	1	1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 3,877,408	\$ 4,028,534
Nonpayroll:	7,400,438	10,241,905
Total	\$ 11,277,846	\$ 14,270,439

Utilization Statistics

	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	4,576		4,932	
Discharges (excluding newborns):				
Patients under 14 years	395	8.6%	933	17.1%
Patients 14-64 years	2,886	63.2%	3,126	57.5%
Patients over 64 years	1,286	28.2%	1,382	25.4%
Total Discharges	4,567	100.0%	5,441	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	1,186	3.9%	3,327	9.4%
Patients 14-64 years	16,537	54.1%	17,672	49.9%
Patients over 64 years	12,825	42.0%	14,386	40.7%
Total Inpatient Days of Care	30,548	100.0%	35,385	100.0%
Outpatient Visits:	21,198		20,616	
Average Length of Stay (Days)	6.69		6.80	
Average Daily Census (Inpatient/Day)	84.0		93.0	
Percent of Occupancy		58.94%		64.81%
Employees Per Patient Day	3.6		3.10	

CHARLOTTE EET HOSPITAL

Address: 1600 East Third Street
Charlotte, NC 28204

Phone: (704) 372-3300
County: Mecklenburg
HSA: 3
Administrative/Chief Executive:
D. Dale Landon

Type of Hospital: Eye, Ear, Nose, and Throat (Specialty)

Owner/Operator: Humana, Inc.

Number of Beds in Use: 68

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Blood Bank
Dental Services
Outpatient Ambulatory Surgery
Full-time Pharmacy
Postoperative Recovery Room
Social Work Department
Radiology Laboratory

Services Contracted For
CAT Scan
Histopathology Laboratory

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	37	30
Number of FTE Employees:	93	87
Number of Physicians and Dentists:	17	32

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Anesthesiology	2	2
Ophthalmology	7	7
Otolaryngology	6	6
Pathology	-	1
Plastic Surgery	-	6
Radiology	1	1
General Dentistry	-	2
Oral Surgery	1	7

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 1,409,714	\$ 1,506,797
Nonpayroll:	2,075,111	2,613,981
TOTAL	\$ 3,484,825	\$ 4,120,778

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	2,602		2,514	
Discharges (excluding newborns):				
Patients under 14 years	631	24.1%	681	24.8%
Patients 14-64 years	1,291	49.3%	1,283	46.6%
Patients over 64 years	696	26.6%	786	28.6%
Total Discharges	2,618	100.0%	2,750	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	1,386	16.5%	1,293	17.3%
Patients 14-64 years	4,072	48.4%	3,696	49.4%
Patients over 64 years	2,949	35.1%	2,489	33.3%
Total Inpatient Days of Care	8,407	100.0%	7,478	100.0%
Outpatient Visits:				
Average Length of Stay (Day)	3.21		2.72	
Average Daily Census(Inpatients/Days)	22.0		20.0	
Percent of Occupancy		33.87%		30.13%
Employees Per Patient Day	4.0		4.40	

CHARTER HILLS HOSPITAL

Address: 700 Walter Reed Drive
Greensboro, NC 27403

Phone: (919) 852-4821
County: Guilford
HSA: 2
Administrative/Chief Executive:
Billie K. Martin (1985)

Type of Hospital: Psychiatric
Owner/Operator: Charter Medical Corporation
Number of Beds in Use: 100

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Occupational Therapy Unit
Full-Time and Part-Time Pharmacy
Social Work Department

Services Contracted For
Clinical Psychology Services
Dental Services
Speech Therapy

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	2	2
Number of Nurses:	20	20
Number of FTE Employees:	80	83
Number of Physicians and Dentists:	12	14

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Psychiatry (Not Neurology)	12	14

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 1,049,611	\$ 1,137,901
Nonpayroll:	1,147,826	2,428,828
Total	\$ 2,197,437	\$ 3,766,729

<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	364		555	
Discharges (excluding newborns):				
Patients under 14 years	2	.6%	49	8.9%
Patients 14-64 years	307	85.7%	395	72.0%
Patients over 64 years	49	13.7%	105	19.1%
Total Discharges	358	100.0%	549	100.0%

<i>Inpatient Days of Care (excluding newborns):</i>				
Patients under 14 years	205	2.3%	3,986	26.6%
Patients 14-64 years	8,022	87.4%	9,007	60.1%
Patients over 64 years	949	10.3%	2,003	13.3%
Total Inpatient Days of Care	9,176	100.0%	14,996	100.0%

Outpatient Visits:

Average Length of Stay (Days)		25.63	27.32
Average Daily Census(Inpatients/Day)	47.0		41.0
Percent of Occupancy		25.14%	41.08%
Employees Per Patient Day	3.2		2.0

CHARTER MANDALA CENTER, INC.

Address: 3637 Old Vineyard Rd.
Winston Salem, NC 27104

Phone: (919) 768-7710
County: Forsyth
HSA: 2
Administrative/Chief Executive:
Dennis Janssen

Type of Hospital: Psychiatric
Owner/Operator: Charter Medical Corporation
Number of Beds in Use: 75

Services Offered (10/1/81 - 9/30/82, 1984-1985)

Inhouse Services

Alcoholic-Detoxification Unit
Psychology Services
Occupational Therapy Unit
Part-Time Pharmacy
Social Work Department

Services Contracted For

CAT Scan
Dental Services
Speech Therapy
EEG-Neurologicals
NPL, NHL

Vocational Rehabilitation Clinical
X-Ray
Laboratory
Physical Therapy
Emergency Services

Employees and Medical Staff

Number of Administrators:
Number of Nurses:
Number of FTE Employees:
Number of Physicians and Dentists:

(10/1/81 - 9/30/82)

1
27
103
11

(10/1/82 - 9/30/83)

1
31
102
12

Medical or Dental Specialty (Number of Physicians)

Psychiatry (Not Neurology)

(10/1/81-9/30/82)

11

(10/1/82-9/30/83)

12

Expenditures

Payroll:
Nonpayroll:
Total

(10/1/81 - 9/30/82)

\$ 1,327,897
2,344,534
\$ 3,672,431

(10/1/82 - 9/30/83)

\$ 1,469,514
2,772,393
\$ 4,241,907

Utilization Statistics

Admissions:

Discharges (excluding newborns):

Patients under 14 years
Patients 14-64 years
Patients over 64 years

Total Discharges

(10/1/81 - 9/30/82)

Number
788

Percent

112 14.2%
624 79.2%
52 6.6%
788 100.0%

(10/1/82 - 9/30/83)

Number
851

Percent

138 16.1%
671 78.3%
48 5.6%
857 100.0%

Inpatient Days of Care (excluding newborns):

Patients under 14 years
Patients 14-64 years
Patients over 64 years

Total Inpatient Days of Care

4,548 24.8%
12,461 68.1%
1,292 7.1%
18,301 100.0%

6,737 30.4%
14,202 64.0%
1,241 5.6%
22,180 100.0%

Outpatient Visits

Average Length of Stay (Days)
Average Daily Census(Inpatients/Day)
Percent of Occupancy
Employees Per Patient Day

-
23.22
54.0
2.1

66.85%

-
25.88
57.0
1.7

81.02%

CHARTER NORTHRIDGE HOSPITAL

Address: 400 Newton Road
Raleigh, NC 27609

Phone: (919) 847-0008
County: Wake
HSA: 4
Administrative/Chief Executive:
Tony Mobley

Type of Hospital: Psychiatric – Chemical Dependency
Owner/Operator: Charter Medical Corporation
Number of Beds in Use: 66

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Detoxification
Adult Inpatient
Adolescent Inpatient
Day/Evening Program
Assessment
Family Counseling
Intervention Training
Industry Consultation
Speakers Bureau

Services Contracted For
None

Employees and Medical Staff

Number of Administrators:	1
Number of Nurses:	15
Number of FTE Employees:	55
Number of Physicians and Dentists:	5 active 20 consulting

Note: Because this new facility opened October 15, 1984, expenditure and utilization information was not available.

COMMUNITY HOSPITAL OF ROCKY MOUNT

Address: 1031 Noell Lane
Rocky Mount, NC 27801

Phone: (919) 443-9101
County: Nash
HSA: 6
Administrative/Chief Executive:
Paul Walker

Type of Hospital: General
Owner/Operator: American Medical International
Number of Beds in Use: 50

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Hospital Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Part-Time Pharmacy
Postoperative Recovery Room
Pulmonary Diseases
Social Work Department

Services Contracted For
Hospice Services

Employees and Medical Staff	(10/1/81 - 9/30/82)	(10/1/82 - 9/30/83)
Number of Administrators:	1	1
Number of Nurses:	58	63
Number of FTE Employees:	142	148
Number of Physicians and Dentists:	59	59

Medical or Dental Specialty (Number of Physicians)	(10/1/81 - 9/30/82)	(10/1/82 - 9/30/83)
Anesthesiology	3	3
Cardiology	1	1
Dermatology	1	1
Eye, Ear, Nose and Throat	3	3
General/Family Practice	7	8
General Surgery	7	7
Internal Medicine	9	10
Neurosurgery	2	1
Obstetrics/Gynecology	5	5
Ophthalmology	2	2
Orthopedics	3	3
Pathology	1	1
Pediatrics	1	1
Plastic Surgery	1	1
Psychiatry (Not Neurology)	1	1
Neurology (Internal Medicine)	1	1
Radiology	1	1
Urology	3	5
Other Physicians	4	2
General Dentistry	2	1
Oral Surgery	1	1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
Payroll:	\$	1,684,950	\$	1,739,500
Nonpayroll:		2,521,764		2,699,794
Total	\$	4,206,714	\$	4,439,294

<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	1,630		1,592	
Discharges (excluding newborns):				
Patients under 14 years	60	3.6%	53	3.3%
Patients 14-64 years	1,139	68.4%	1,071	67.3%
Patients over 64 years	467	28.0%	467	29.4%
Total Discharges	1,666	100.0%	1,591	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	303	2.2%	190	1.5%
Patients 14-64 years	8,143	57.7%	7,876	60.9%
Patients over 64 years	5,658	40.1%	4,867	37.6%
Total Inpatient Days of Care	14,104	100.0%	12,933	100.0%
Outpatient Visits:	2,143		2,377	
Average Length of Stay (Days)	8.47		8.13	
Average Daily Census (Inpatients/Day)	39.0		36.0	
Percent of Occupancy		78.86%		72.31%
Employees Per Patient Day	3.7		4.20	

DAVIS COMMUNITY HOSPITAL

Address: Old Mocksville Road
Statesville, NC 28677

Phone: (704) 873-0281

County: Iredell

HSA: 3

Administrative/Chief Executive:
Steven L. Blaine

Type of Hospital: General

Owner/Operator: Hospital Corporation of America

Number of Beds in Use: 149

Services Offered (10/1/81 - 9/30/82)

Inhouse Services

Chemotherapy
Histopathology Laboratory
Hospital Auxiliary
Outpatient Ambulatory Surgery
Paramedical Training Program
Full-Time Pharmacy
Part-Time Pharmacy
Postoperative Recovery Room
Premature Nursery
Social Work Department

Services Contracted For

Blood Bank
CAT Scan
Speech Therapy

Employees and Medical Staff

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Number of Administrators: 2
Number of Nurses: 95
Number of FTE Employees: 386
Number of Physicians and Dentists: 59

5
170
356
54

Medical or Dental Specialty (Number of Physicians)

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Anesthesiology 3
Cardiology 2
Dermatology 1
Eye, Ear, Nose, and Throat 3
Emergency Medicine 1
General/Family Practice 5
General Surgery 5
Internal Medicine 5
Obstetrics/Gynecology 8
Ophthalmology 4
Orthopedics 3
Otolaryngology 2
Pathology 2
Pediatrics 4
Radiology 1
Urology 3
Other Physicians 3
General Dentistry 4
Oral Surgery 1

1
2
1
-
1
3
4
6
8
3
3
4
2
3
1
3
3
5
1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
Payroll:	\$ 5,631,091		\$ 4,633,497	
Nonpayroll:	4,149,177		3,418,830	
Total	\$ 9,780,268		\$ 8,052,327	
<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	6,099		5,866	
Discharges (excluding newborns):				
Patients under 14 years	812	14.2%	1,211	19.6%
Patients 14-64 years	3,374	58.8%	3,037	53.4%
Patients over 64 years	1,546	27.0%	1,670	27.0%
Total Discharges	5,973	100.0%	6,188	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	2,536	6.6%	3,894	9.9%
Patients 14-64 years	20,462	52.9%	19,707	50.1%
Patients over 64 years	15,672	40.5%	15,726	40.0%
Total Inpatient Days of Care	38,670	100.0%	39,327	100.0%
Outpatient Visits:	15,551		17,122	
Average Length of Stay (Days)	6.75		6.51	
Average Daily Census(Inpatients/Day)	110.0		105.0	
Percent of Occupancy		67.91%		62.58%
Employees Per Patient Day	3.5		3.30	

NOTE: Davis Community Hospital first signed a management contract with Hospital Corporation of America in October of 1981 at the very beginning of the period from which most of the information on this chart was taken. It was purchased by HCA in 1983, during the reporting period 10/1/82 - 9/30/83.

EDGECOMBE GENERAL HOSPITAL

Address: 2901 North Main Street
Tarboro, NC 27886

Phone: (919) 641-7111
County: Edgecombe
HSA: 6
Administrative/Chief Executive:
J. Lewis Ridgeway

Type of Hospital: General
Owner/Operator: Hospital Corporation of America
Number of Beds in Use: 127

Services Offered (10/1/82 - 9/30/83)

Inhouse Services

Abortion (Inpatient)
Abortion (Outpatient)
Blood Bank
Cardiac Rehabilitation Program
Histopathology Laboratory
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room
Premature Nursery

Services Contracted For Speech Therapy

Employees and Medical Staff

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Number of Administrators:
Number of Nurses:
Number of FTE Employees:
Number of Physicians and Dentists:

1
156
293
39

1
116
276
31

Medical or Dental Specialty (Number of Physicians)

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Anesthesiology
Eye, Ear, Nose and Throat
Emergency Medicine
General/Family Practice
General Surgery
Internal Medicine
Obstetrics/Gynecology
Ophthalmology
Otolaryngology
Pathology
Pediatrics
Psychiatry (Not Neurology)
Radiology
General Dentistry
Oral Surgery

1
2
3
7
2
5
3
1
2
1
4
1
1
5
1

-
-
1
6
2
5
3
1
2
1
2
1
1
5
1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
Payroll	\$	4,000,000	\$	4,334,104
Nonpayroll		3,900,000		4,259,515
Total	\$	7,900,000	\$	8,593,619
<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	3,659		3,874	
Discharges (excluding newborns):				
Patients under 14 years	462	13.0%	1,002	22.6%
Patients 14-64 years	2,183	60.0%	2,410	54.4%
Patients over 64 years	1,003	27.0%	1,020	23.0%
Total Discharges	3,653	100.0%	4,432	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	2,125	8.0%	3,929	13.2%
Patients 14-64 years	13,576	48.0%	14,217	47.7%
Patients over 64 years	12,624	44.0%	11,657	39.1%
Total Inpatient Days of Care	27,978	100.0%	29,803	100.0%
Outpatient Visits:	13,215		15,658	
Average Length of Stay (Days)	7.66		7.22	
Average Daily Census (Inpatients/Day)	76.7		73.0	
Percent of Occupancy		71.0%		60.08%
Employees Per Patient Day	3.96		3.40	

FRANKLIN MEMORIAL HOSPITAL

Address: 100 Hospital Drive
Louisburg, NC 27549

Phone: (919) 496-5131
County: Franklin
HSA: 4
Administrative/Chief Executive:
Robert Miller

Type of Hospital: General
Owner: Franklin County
Operator: Hospital Corporation of America*
Number of Beds in Use: 76

Services Offered (10/1/82 - 9/30/83)

Inhouse Services

Abortion (Inpatient)
Blood Bank
Hospital Auxiliary
Outpatient Ambulatory Surgery
Para-Medical Training
Full-time Pharmacy
Postoperative Recovery Room
Social Work Department

Services Contracted For None

Employees and Medical Staff *(10/1/81 - 9/30/82)* *(10/1/82 - 9/30/83)*

Number of Administrators:	1	-	
Number of Nurses:	50	42	
Number of FTE Employees:	177	181	
Number of Physicians and Dentists:	13	13	

Medical or Dental Specialty *(10/1/81 - 9/30/82)* *(10/1/82 - 9/30/83)* **(Number of Physicians)**

General/Family Practice	7	6	
General Surgery	1	1	
Internal Medicine	-	1	
Pathology (Part-Time)	1	1	
Radiology (Group of 10 consultants)	1	1	
Urology	1	1	
General Dentistry	2	2	

Expenditures *(10/1/81 - 9/30/82)* *(10/1/82 - 9/30/83)*

Payroll:	\$ 2,121,325	\$ 2,294,949	
Nonpayroll:	2,099,245	2,441,375	
Total	\$ 4,220,570	\$ 4,736,324	

*Hospital Corporation of America entered into this management contract on June 15, 1983.

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	2,655		2,417	
Discharges (excluding newborns):				
Patients under 14 years	79	3.0%	108	4.4%
Patients 14-64 years	1,357	52.0%	1,118	45.5%
Patients over 64 years	1,175	45.0%	1,229	50.1%
Total Discharges	2,611	100.0%	2,455	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	239	1.1%	357	1.7%
Patients 14-64 years	7,932	36.6%	6,383	30.6%
Patients over 64 years	13,472	62.3%	14,128	67.7%
Total Inpatient Days of Care	21,643	100.0%	20,868	100.0%
Outpatient Visits:	15,140 [*]		10,079	
Average Length of Stay (Days)	8.29		8.56	
Average Daily Census (Inpatients/Day)		.60%		58.0%
Percent of Occupancy	78.02		74.97	
Employees Per Patient Day	3.0		3.20	

^{*}A change in counting occurred in 1982-83.

FRYE REGIONAL MEDICAL CENTER*

Address: 420 North Center Street
Hickory, NC 28601

Phone: (704) 322-6070
County: Catawba
HSA: 1
Administrative/Chief Executive:
John D. Holly, III

Type of Hospital: General
Owner/Operator: American Medical International
Number of Beds in Use: 275

Services Offered (10/1/82 - 9/30/83)

Inhouse Service

Alcohol Detoxification Unit
Blood Bank
Cardiac Rehabilitation Program
CAT Scan
Chemotherapy
Clinical Psychology
Dental Services
Histopathology Laboratory
Home Health Care Unit
Hospital Auxiliary
Occupational Therapy Unit
Outpatient Ambulatory Surgery
Paramedical Training Program
Full-Time Pharmacy
Podiatric Services
Postoperative Recovery Room
Premature Nursery
Psychiatric Emergency Services
Pulmonary Diseases
Inpatient/Outpatient Rehabilitation
Speech Therapy
Social Work Department

Services Contracted For Hospice

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
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Number of Administrators:	5	5
Number of Nurses:	295	306
Number of FTE Employees:	670	578
Number of Physicians and Dentists:	85	90

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
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Anesthesiology	2	2
Cardiology	-	2
Dermatology	2	2
Eye, Ear, Nose and Throat	-	4
Emergency Medicine	3	4
General/Family Practice	16	16

*Formerly Glenn R. Frye Memorial Hospital

Medical or Dental Specialty, continued
(Number of Doctors)

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

General Surgery	1	5
Internal Medicine	6	9
Neurosurgery	1	2
Obstetrics/Gynecology	9	10
Ophthalmology	6	5
Orthopedics	7	7
Otolaryngology	4	4
Pathology	3	4
Pediatrics	5	5
Plastic Surgery	1	1
Psychiatry (Not Neurology)	3	4
Neurology (Internal Medicine)	1	1
Radiology	6	8
Thoracic Surgery	3	3
Urology	3	3
Other Physicians	1	1
Oral Surgery	2	2

Expenditures

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Payroll:	\$ 7,428,326	\$ 9,276,000
Nonpayroll:	11,916,744	12,515,000
Total:	\$ 19,345,070	\$ 21,791,000

Utilization Statistics

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

	Number	Percent	Number	Percent
Admissions:	8,984		8,730	
Discharges (excluding newborns):				
Patients under 14 years	754	8.4 %	1,460	15.3%
Patients 14-64 years	6,094	67.6 %	5,912	62.1%
Patients over 64 years	2,164	24.0 %	2,148	22.6%
Total Discharges	9,012	100.0 %	9,520	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	3,001	4.9%	5,302	9.0%
Patients 14-64 years	36,114	59.4%	34,289	58.4%
Patients over 64 years	21,745	35.7%	19,140	32.6%
Total Inpatient Days of Care	60,860	100.0%	58,731	100.0%
Outpatient Visits	31,505		32,502	
Average Length of Stay (Days)	6.75		6.40	
Average Daily Census (Inpatients/Day)	156.0		153.0	
Percent of Occupancy:		76.1%		70.11%
Employees Per Patient Day	4.3		3.60	

GORDON CROWELL MEMORIAL HOSPITAL

Address: 816 South Aspen Street
Lincolnton, NC 28072

Phone: (704) 732-2271

County: Lincoln

HSA: 3

Administrative/Chief Executive:
Joseph Brandon

Type of Hospital: General

Owner/Operator: American Medical International

Number of Beds in Use: 93

Services Offered (10/1/82 - 9/30/83)

Inhouse Services

Blood Bank

Dental Services

Outpatient Ambulatory Surgery

Full-Time Pharmacy

Postoperative Recovery Room

Social Work Department

Services Contracted For Chemotherapy

Employees and Medical Staff

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Number of Administrators:

1

1

Number of Nurses:

77

74

Number of FTE Employees:

199

141

Number of Physicians and Dentists:

20

20

Medical or Dental Specialty (Number of Physicians)

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Emergency Medicine

2

2

General/Family Practice

4

4

General Surgery

2

1

Internal Medicine

4

5

Obstetrics/Gynecology

2

2

Orthopedics

1

1

Pediatrics

2

2

Radiology

2

2

Urology

1

1

Expenditures

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Payroll:

\$ 2,042,026

\$ 2,112,834

Nonpayroll:

3,834,172

4,180,545

Total

\$ 5,876,198

\$ 6,293,379

<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	3,041		2,790	
Discharges (excluding newborns):				
Patients under 14 years	367	13.1%	556	20.6%
Patients 14-64 years	2,254	80.2%	1,940	71.8%
Patients over 64 years	188	6.7%	207	7.6%
Total Discharges	2,809	100.0%	2,703	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	2,066	12.3%	2,273	14.7%
Patients 14-64 years	11,406	67.6%	10,576	68.3%
Patients over 64 years	3,305	20.1%	2,634	17.0%
Total Inpatient Days of Care	16,857	100.0%	15,483	100.0%
Outpatient Visits:	5,808		4885	
Average Length of Stay (Days)	6.0		6.02	
Average Daily Census (Inpatient/Day)	48.0		42.0	
Percent of Occupancy		49.66%		43.31%
Employees Per Patient Day	4.1		3.40	

HSA BRYNN MARR*

Address: 192 Village Drive
Jacksonville, NC 28540

Phone: (919) 577-1400
County: Onslow
HSA: 6
Administrative/Chief Executive:
Ray Luccasen

Type of Hospital: Psychiatric
Owner/Operator: Healthcare Services of America
Number of Beds in Use: 76

Employees and Medical Staff

Number of Administrators:
Number of Nurses:
Number of FTE Employees:
Number of Physicians and Dentists:

*Brynn Marr, a new facility, opened for the first time in November, 1983. Information in the profile is based on a partial year report.

HSA CUMBERLAND HOSPITAL

Address: 3425 Melrose Road
Fayetteville, NC 28304

Phone: (919)485-7181
County: Cumberland
HSA: 5
Administrative/Chief Executive:
Harold Katz

Type of Hospital: Psychiatric
Owner/Operator: Healthcare Services of America
Number of Beds in Use: 154

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Alcoholic-Detoxification Unit
Clinical Psychology Service
Occupational Therapy Unit
Psychiatric Emergency Services
Social Work Department
Adult Psychiatric
Adolescent Psychiatric
Child Psychiatric

Services Contracted For
CAT Scan
Dental Services
Full-Time Pharmacy
Speech Therapy

Employees and Medical Staff (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Number of Administrators:	2	1
Number of Nurses:	31	27
Number of FTE Employees:	173	142
Number of Physicians and Dentists:	6	6

Medical or Dental Specialty (Number of Physicians) (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Eye, Ear, Nose and Throat	-	1
General Family Practice	-	1
Psychiatry (Not Neurology)	5	4
Other Physicians	1	-

Expenditures (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Payroll:	\$ 2,141,648	\$ 2,092,969
Nonpayroll:	2,439,014	2,327,947
Total	\$ 4,580,662	\$ 4,420,916

Payroll:	\$ 2,141,648	\$ 2,092,969
Nonpayroll:	2,439,014	2,327,947
Total	\$ 4,580,662	\$ 4,420,916

HICKORY MEMORIAL HOSPITAL

Address: 219 North Center Street
Hickory, NC 28601

Phone: (704)328-2226
County: Catawba
HSA: 1
Administrative/Chief Executive:
Leland R. Blessum

Type of Hospital: Psychiatric Hospital
Owner/Operator: United Medical Corporation
Number of Beds in Use: 64

Services Offered (10/1/81 - 9/30/82)

Inhouse Services

Abortion (Outpatient)
Blood Bank
Clinical Psychology Services
Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Post-Operative Recovery Room
Psychiatric Emergency Services
Pulmonary Diseases
Social Work Department

Services Contracted For

Ambulatory Self-Care
Cardiac Rehabilitation Program
CAT Scan Hospital
Chemotherapy
Histopathology
Occupational Therapy

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	30	38
Number of FTE Employees:	71	96
Number of Doctors and Dentists:	22	23

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
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General/Family Practice	8	8
General Surgery	2	2
Obstetrics/Gynecology	1	1
Ophthalmology	1	1
Orthopedics	-	1
Otolaryngology	1	1
Pathology	3	3
Psychiatry (Not Neurology)	3	3
Radiology	2	2
Oral Surgery	1	1

*Hickory Memorial, formerly a general hospital, gradually converted a percentage of its general short-term beds to psychiatric beds in order to become a psychiatric hospital.

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 768,540	\$ 1,035,435
Nonpayroll:	916,897	952,705
TOTAL	\$ 993,747	\$ 1,988,140

<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	665		782	
Discharges (excluding newborns):				
Patients under 14 years	16	2.5%	22	2.8%
Patients 14-64 years	424	65.7%	526	67.4%
Patients over 64 years	205	31.8%	233	29.8%
Total Discharges	645	100.0%	781	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	163	2.7%	454	5.4%
Patients 14-64 years	3716	61.8%	5,603	67.0%
Patients over 64 years	2131	35.5%	2,309	27.6%
Total Inpatient Days of Care	6010	100.0%	8,366	100.0%
Outpatient Visits	87		276	
Average Length of Stay (Days)	9.32		10.71	
Average Daily Census(Inpatients/Day)	17.0		23.0	
Percent of Occupancy		42.22%		35.81%
Employees Per Patient Day	4.4		4.40	

HIGHLAND HOSPITAL

Address: 49 Zillicoa Street
Asheville, NC 28801

Phone: (704) 254-3201
County: Buncombe
HSA: 1
Administrative/Chief Executive:
Jack W. Bonner, III, M.D.

Type of Hospital: Psychiatric

Owner/Operator: Highland Psychiatric Associates

(Psychiatric Institutes of America, a subsidiary of National Medical Enterprises,
owns part of partnership)

Number of Beds in Use: 125

Services Offered (10/1/82 - 9/30/83)

Inhouse Services

Alcohol Detoxification Unit
Clinical Psychology Services
Occupational Therapy Unit
Part-Time Pharmacy
Psychiatric Emergency Services
Psychiatric Outpatient Unit
Social Work Department

Services Contracted For

Chemotherapy
Dental Services
Histopathology Laboratory
Pulmonary Diseases
Speech Therapy

Employees and Medical Staff

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Number of Administrators: 1
Number of Nurses: 36
Number of FTE Employees: 214
Number of Physicians and Dentists: 9

2
45
219
8

Medical or Dental Specialty Number of Physicians

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Psychiatry (not Neurology)

9

8

Expenditures

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Payroll: \$ 2,762,433
Nonpayroll: 4,126,496
TOTAL \$ 6,888,929

\$ 2,825,166
3,852,898
\$ 6,678,064

Utilization Statistics

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

	Number	Percent	Number	Percent
Admissions:	321		324	
Discharges (excluding newborns):				
Patients under 14 years	2	0.6%	5	1.5%
Patients 14-64 years	303	94.1%	305	92.1%
Patients over 64 years	17	5.3%	21	6.4%
Total Discharges	322	100.0%	331	100.0%

Utilization Statistics
continued

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	1,067	3.0%	1,799	5.7%
Patients 14-64 years	34,001	95.2%	28,492	91.1%
Patients over 64 years	635	1.8%	996	3.2%
Total Inpatient Days of Care	35,703	100.0 %	31,287	100.0%
Outpatient Visits	2,259		1,949	
Average Length of Stay (Days)	100		94.52	
Average Daily Census (Inpatients/Day)	82		76.0	
Percent of Occupancy		85.8%		68.57%
Employees Per Patient Day	2.6		2.6	

HIGHSMITH - RAINEY MEMORIAL HOSPITAL

Address: 150 Robeson Street
Fayetteville, NC 28301

Phone: (919) 483-7400
County: Cumberland
HSA: 5
Administrative/Chief Executive:
G. Michael Girone

Type of Hospital: General
Owner/Operator: Hospital Corporation of America
Number of Beds in Use: 150

Services Offered (10/1/82 - 9/30/83)

Inhouse Services

Abortion (Inpatient)
Blood Bank
Chemotherapy
Dental Services
Histopathology Laboratory
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room
Pulmonary Diseases
Social Work Department

Services Contracted For

CAT Scan
Paramedical Training
Speech Therapy

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	57	89
Number of FTE Employees:	199	294
Number of Physicians and Dentists:	155	116

<i>Medical or Dental Specialty</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
<i>Number of Physicians</i>		
Anesthesiology	4	5
Dermatology	1	-
Eye, Ear, Nose and Throat	2	-
Emergency Medicine	4	2
General/Family Practice	18	17
General Surgery	10	7
Internal Medicine	27	23
Neurosurgery	3	3
Obstetrics/Gynecology	21	16
Ophthalmology	4	4
Orthopedics	6	4
Otolaryngology	4	2
Pathology	5	5
Pediatrics	13	-
Plastic Surgery	2	2
Psychiatry (Not Neurology)	7	4
Neurology (Internal Medicine)	-	2
Radiology	7	9
Thoracic Surgery	-	2
Urology	5	5
Other Physicians	1	-
General Dentistry	5	-
Oral Surgery	4	4

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
Payroll:	\$ 18,954		\$ 4,792,375	
Nonpayroll:	2,478,561		7,215,502	
Total	\$ 5,637,515		\$ 12,007,877	
<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	3,719		3,440	
Discharges (excluding newborns):				
Patients under 14 years	238	6.39%	105	3.1%
Patients 14-64 years	2,386	64.05%	2,104	62.6%
Patients over 64 years	1,101	29.56%	1,151	34.3%
Total Discharges	3,725	100.0 %	3,360	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	426	1.8 %	169	0.7%
Patients 14-64 years	11,940	50.1 %	12,044	49.5%
Patients over 64 years	11,470	48.1 %	12,100	49.8%
Total Inpatient Days of Care	23,836	100.0 %	24,313	100.0%
Outpatient Visits:	2,336		2,712	
Average Length of Stay (Days)	6.4		7.24	
Average Daily Census (Inpatients/Day)	65.0		69.0	
Percent of Occupancy:		68.74		44.41
Employees Per Patient Day	3.1		4.50	

HOLLY HILL HOSPITAL

Address: 3019 Falstaff Road
Raleigh, NC 27610

Phone: (919) 755-1840
County: Wake
HSA: 4
Administrative/Chief Executive:
Tommie L. Duncan

Type of Hospital: Psychiatric
Owner/Operator: Hospital Corporation of America
Number of Beds in Use: 108

Services Offered (10/1/82 - 9/30/83)

Inhouse Service

Clinical Psychology Services
Occupational Therapy Unit
Full-Time Pharmacy
Psychiatric Emergency Services
Social Work Department

Services Contracted For

Dental Services
Speech Therapy

Employees and Medical Staff

Number of Administrators:
Number of Nurses:
Number of FTE Employees:
Number of Physicians and Dentists:

(10/1/81 - 9/30/82)

1
30
86
26

(10/1/82 - 9/30/83)

1
29
84
28

Medical or Dental Specialty (Number of Physicians)

Psychiatry (Not Neurology)

(10/1/81 - 9/30/82)

26

(10/1/82 - 9/30/83)

28

Expenditures

Payroll:
Nonpayroll:
Total

(10/1/81 - 9/30/82)

\$ 1,348,399
1,565,087
\$ 2,913,486

(10/1/82 - 9/30/83)

\$ 1,514,770
1,509,493
\$ 3,024,263

Utilization Statistics

Admissions:

Discharges (excluding newborns):

Patients under 14 years
Patients 14-64 years
Patients over 64 years

Total Discharges

(10/1/81 - 9/30/82)

Number
765
Percent

12 1.6%
636 84.3%
106 14.1%
754 100.0%

(10/1/82 - 9/30/83)

Number
800
Percent

28 3.5%
692 85.4%
90 11.1%
810 100.0%

Inpatient Days of Care (excluding newborns):

Patients under 14 years
Patients 14-64 years
Patients over 64 years

Total Inpatient Days of Care

1,090 6.4%
14,396 84.4%
1,569 9.2%
17,055 100.0 %

1,020 6.3%
13,350 81.8%
1,946 11.9%
16,316 100.0 %

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Outpatient Visits	-		-	
Average Length of Stay (Days)	22.62		20.14	
Average Daily Census (Inpatients/Day)	47.0		49.0.0	
Percent of Occupancy		80.56%		77.07%
Employees Per Patient Day	1.9		1.9	

HUMANA HOSPITAL GREENSBORO

Address: 1501 Pembroke Road
Greensboro, NC 27408

Phone: (919) 373-8555
County: Guilford
HSA: 2
Administrative/Chief Executive:
M. Phillip Barbee

Type of Hospital: General
Owner/Operator: Humana, Inc.
Number of Beds in Use: 130

Services Offered (10/1/81 - 9/30/82)

Inhouse Services

Abortion (Inpatient)
Abortion (Outpatient)
Blood Bank
Cardiac Rehabilitation Program
CAT Scan
Dental Services
Histopathology Laboratory
Hospital Auxiliary
ICCU
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Non-invasive Vascular Lab
Postoperative Recovery Room
Social Work Department
Telemetry

Services Contracted For None

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	3	3
Number of Nurses:	132	98
Number of FTE Employees:	287	243
Number of Physicians and Dentists:	190	193

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Anesthesiology	2	2
Cardiology	8	8
Dermatology	1	1
Emergency Medicine	1	-
General/Family Practice	13	15
General Surgery	13	13
Internal Medicine	29	23
Neurosurgery	3	3
Obstetrics/Gynecology	26	26
Ophthalmology	14	15
Orthopedics	17	17
Otolaryngology	7	8
Pathology	1	1
Pediatrics	3	2
Plastic Surgery	7	6
Neurology (Internal Medicine)	2	2

<i>Medical or Dental Specialty</i> <i>(Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Radiology	2	3
Thoracic Surgery	1	2
Urology	9	9
General Dentistry	25	29
Oral Surgery	6	7
Other Physicians	-	1

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 4,605,463	\$ 4,845,799
Nonpayroll:	6,305,483	6,889,894
Total	\$ 10,910,946	\$ 11,735,693

<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	5,120		4,272	
Discharges (excluding newborns):				
Patients under 14 years	139	2.7 %	134	3.1%
Patients 14-64 years	3,411	66.2 %	2,871	66.9%
Patients over 64 years	1,601	31.1 %	1,289	30.0%
Total Discharges	5,151	100.0 %	4,294	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	261	0.9 %	302	1.1%
Patients 14-64 years	18,682	66.1 %	16,937	64.4%
Patients over 64 years	9,309	33.0 %	9,068	34.5%
Total Inpatient Days of Care	28,252	100.0 %	26,307	100.0%
Outpatient Visits:	9,296		8,241	
Average Length of Stay (Day)	5.48		6.13	
Average Daily Census(Inpatients/Days)	77.00		72.0	
Percent of Occupancy		77.40%		72.07%
Employees Per Patient Day	3.70		3.40	

JOHNSTON MEMORIAL HOSPITAL

Address: Highway 301 North
Smithfield, NC 27577

Phone: (919) 934-8171
County: Johnston
HSA: 4
Administrative/Chief Executive:
Herman Mullins

Type of Hospital: General
Owner: Johnston County
Operator: Hospital Corporation of America
Number of Beds in Use: 180

Services Offered (10/1/82 - 9/30/83)

Inhouse Services

Abortion (Inpatient)
Abortion (Outpatient)
Alcoholic-Detoxification
Blood Bank
Hospital Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room
Psychiatric Emergency Services
Pulmonary Diseases
Social Work Department

Services Contracted For Clinical Psychology Services Histopathology Laboratory

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	153	128
Number of FTE Employees:	408	379
Number of Physicians and Dentists:	38	44

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
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Eye, Ear, Nose and Throat	1	-
Emergency Medicine	2	3
General/Family Practice	6	6
General Surgery	4	4
Internal Medicine	5	7
Obstetrics/Gynecology	2	2
Ophthalmology	1	1
Orthopedics	1	1
Otolaryngology	-	1
Pediatrics	2	2
Psychiatry (Not Neurology)	2	2
Radiology	2	2
Urology	1	1
General Dentistry	11	12
Number of Specialties	13	-

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 4,819,138	\$ 4,853,739
Nonpayroll:	4,202,594	4,830,862
Total	\$ 9,021,732	\$ 9,684,601

<i>Utilization Statistics</i>	<i>(10/1/81 - 9/30/82)</i>		<i>(10/1/82 - 9/30/83)</i>	
	Number	Percent	Number	Percent
Admissions:	6,198		5,160	
Discharges (excluding newborns):				
Patients under 14 years	558	9.0%	1,018	16.4%
Patients 14-64 years	4,304	69.4%	3,735	60.1%
Patients over 64 years	1,337	21.6%	1,463	23.5%
Total Discharges	6,199	100.0%	6,216	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	2,218	5.3%	3,914	9.8%
Patients 14-64 years	23,980	57.4%	20,485	51.2%
Patients over 64 years	15,608	37.3%	15,598	39.0%
Total Inpatient Days of Care	41,806	100.0%	39,997	100.0%
Outpatient Visits:	95,390		18,091	
Average Length of Stay (Days)	6.74		6.69	
Average Daily Census (Inpatients/Day)	119.0		104.0	
Percent of Occupancy		63.63%		57.90
Employees Per Patient Day	3.5		3.50	

LIFE CENTER OF FAYETTEVILLE

Address: 3425 Melrose Road
Fayetteville, NC 28301

Phone: (919) 485-7188
County: Cumberland
HSA: 5
Administrative/Chief Executive:
Robert R. Brown

Type of Hospital: Chemical Dependency Treatment Center
Owner: Healthcare Services of America
Operator: Healthcare Services of America
Number of Beds in Use: 34

As the Life Center of Fayetteville has been in operation for less than one year, statistical information is not yet available.

LIFE CENTER OF JACKSONVILLE

Address: 192 Village Drive
Jacksonville, NC 28542

Phone: (919) 577-7076
County: Onslow
HSA: 6
Administrative/Chief Executive:
Charles Sharpe

As the Life Center of Jacksonville has been in operation for less than one year, statistical information is not yet available.

LIFE CENTER OF WILMINGTON

Address: 2520 Troy Drive
Wilmington, NC 28401

Phone: (919) 762-2727
County: New Hanover
HSA: 6
Administrative/Chief Executive:
William L. Griffin

As the Life Center of Wilmington has been in operation for less than one year, statistical information is not yet available.

LOWRANCE HOSPITAL

Address: 610 East Center Avenue
Mooresville, NC 28155

Phone: (704) 663-1113
County: Iredell
HSA: 3
Administrative/Chief Executive:
George G. Karahalis

Type of Hospital: General
Owner: Iredell County
Operator: Hospital Corporation of America
Number of Beds in Use: 121

Services Offered (10/1/81 - 9/30/82)

Inhouse Services
Abortion (Inpatient)
Abortion (Outpatient)
Dental Services
Hospital Auxiliary
Outpatient Ambulatory Surgery
Paramedical Training Program
Full-Time Pharmacy
Postoperative Recovery Room
Social Work Department

Services Contracted For
Speech Therapy
Blood Bank
Histopathology Laboratory

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	101	105
Number of FTE Employees:	288	239
Number of Physicians and Dentists:	14	17

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Emergency Medicine	-	2
General/Family Practice	4	4
General Surgery	2	2
Internal Medicine	1	1
Obstetrics/Gynecology	2	2
Pathology	1	1
Pediatrics	1	1
Radiology	1	1
Thoracic Surgery	1	1
Urology	1	2

Expenditures	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
Payroll:	\$	3,328,494	\$	3,451,478
Nonpayroll:		2,650,799		2,738,456
Total	\$	5,979,293	\$	6,189,934

Utilization Statistics	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	3,762		3,362	
Discharges (excluding newborns):				
Patients under 14 years	216	5.7%	345	9.9%
Patients 14-64 years	2,204	58.3%	1,836	52.7%
Patients over 64 years	1,359	36.0%	1,304	37.4%
Total Discharges	3,779	100.0%	3,485	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	808	2.9%	1,279	5.4%
Patients 14-64 years	13,509	48.6%	10,714	44.8%
Patients over 64 years	13,497	48.5%	11,901	49.8%
Total Inpatient Days of Care	27,808	100.0%	23,894	100.0%
Outpatient Visits:	22,373		21,347	
Average Length of Stay (Days)	7.36		6.99	
Average Daily Census (Inpatient/Day)	76.0		65.0	
Percent of Occupancy		65.68%		53.25%
Employees Per Patient Day	3.7		3.70	

NOTE: Lowrance Hospital's first investor-owned connection was in July of 1983, when it signed a management contract with HCA. Therefore, most of the above information describes the hospital before its investor-owned corporation involvement.

THE McDOWELL HOSPITAL*

Address: 100 Rankin Drive
Marion, NC 28752

Phone: (704) 652-2125
County: McDowell
HSA: 1
Administrative/Chief Executive:
Oscar R. Aylor

Type of Hospital: General
Owner: The McDowell Hospital, Inc. (a nonprofit corporation)
Operator: The Delta Group, Inc.
Number of Beds in Use: 65

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Hospital Auxiliary
Part-Time Pharmacy
Outpatient Ambulatory Surgery
Postoperative Recovery Room
Social Work Department

Services Contracted For
Blood Bank
CAT Scan
Histopathology Laboratory

Employees and Medical Staff (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Number of Administrators:	1	1
Number of Nurses:	46	45
Number of FTE Employees:	166	168
Number of Physicians and Dentists:	16	15

Medical or Dental Specialty (Number of Physicians) (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Emergency Medicine	-	1
General/Family Practice	11	9
General Surgery	2	2
Internal Medicine	1	1
Pediatrics	1	1
Radiology	1	1

Expenditures (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Payroll:	\$ 1,780,315	\$ 2,260,557
Nonpayroll:	2,196,748	2,319,544
Total	\$ 3,977,063	\$ 4,580,101

*Formerly Marion General Hospital

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	3,297		3,323	
Discharges (excluding newborns):				
Patients under 14 years	256	7.7 %	228	6.9%
Patients 14-64 years	1,973	59.6 %	1,938	58.6%
Patients over 64 years	1,080	32.7 %	1,143	34.5%
Total Discharges	3,309	100.0 %	3,309	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	796	4.7 %	649	3.7%
Patients 14-64 years	8,689	50.8 %	8,432	48.0%
Patients over 64 years	7,601	44.5 %	8,481	48.3%
Total Inpatient Days of Care	17,086	100.0 %	17,562	100.0%
Outpatient Visits:	12,192		11,485	
Average Length of Stay (Days)	5.10		5.31	
Average Daily Census(Inpatients/Day)	46.0		47.0	
Percent of Occupancy		74.60%		77.40%
Employees Per Patient Day	3.5		3.40	

NOTE: The McDowell Hospital's first investor-owned connection began in January of 1982 when it signed a management contract with The Delta Group, Inc. That date was in the middle of the year for which much of the above information was reported.

McPHERSON HOSPITAL

Address: 1100 West Main Street
Durham, NC 27701

Phone: (919) 682-9341

County: Durham

HSA: 4

Administrative/Chief Executive:

Thomas G. Peyton

Type of Hospital: Eye, Ear, Nose and Throat (Specialty)

Owner/Operator: An Independent Proprietary Corporation

Number of Beds in Use: 30

Services Offered (10/1/81 - 9/30/82)

Inhouse Services
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room

Services Contracted For
Blood Bank
CAT Scan
Chemotherapy
Histopathology Laboratory
Organ Bank

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	57	57
Number of FTE Employees:	143	139
Number of Physicians and Dentists:	12	12
<i>Medical or Dental Specialty</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
<i>Number of Physicians</i>		
Ophthalmology	7	7
Otolaryngology	5	5
<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 1,313,504	\$ 1,456,241
Nonpayroll:	1,060,874	967,568
Total	\$ 2,374,378	\$ 2,423,809

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	1,917		1,715	
Discharges (excluding newborns):				
Patients under 14 years	212	11.1%	197	11.4%
Patients 14-64 years	1,119	58.6%	974	56.3%
Patients over 64 years	578	30.3%	558	32.3%
Total Discharges	1,909	100.0%	1,729	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	434	7.1%	381	7.8%
Patients 14-64 years	3,315	54.4%	2,533	51.9%
Patients over 64 years	2,349	38.5%	1,971	40.3%
Total Inpatient Days of Care	6,098	100.0%	4,885	100.0%
Outpatient Visits:	50,306		51,400	
Average Length of Stay (Days)	3.19		2.83	
Average Daily Census (Inpatients/Day)	17.0		14.0	
Percent of Occupancy		52.21%		44.61%
Employees Per Patient Day*	8.9		10.70	

* Includes Clinic Employees

MEDICAL PARK HOSPITAL

Address: 1950 South Hawthorne Rd.
Winston-Salem, NC 27103

Phone: (919) 768-7680

County: Forsyth

HSA: 2

Administrative/Chief Executive:

Earl Tyndall

Type of Hospital: General

Owner: A Proprietary Limited Partnership

Operator: Hospital Corporation of America

Number of Beds in Use: 136

Services Offered (10/1/81 - 9/30/82)

Inhouse Services

Abortion (Inpatient)

Abortion (Outpatient)

Blood Bank

Dental Services

Histopathology Laboratory

Outpatient Ambulatory Surgery

Paramedical Training Program

Full-Time Pharmacy

Postoperative Recovery Room

Services Contracted For

CAT Scan

Chemotherapy

Part-Time Pharmacy

Employees and Medical Staff

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Number of Administrators:

1

1

Number of Nurses:

111

123

Number of FTE Employees:

263

276

Number of Physicians and Dentists:

64

53

Medical or Dental Specialty (Number of Physicians)

(10/1/81 - 9/30/82)

(10/1/82 - 9/30/83)

Anesthesiology

2

2

Eye, Ear, Nose, and Throat

-

4

General Surgery

14

13

Internal Medicine

6

6

Obstetrics/Gynecology

12

6

Ophthalmology

5

4

Orthopedics

4

4

Otolaryngology

4

-

Pathology

2

2

Plastic Surgery

1

1

Radiology

1

1

Thoracic Surgery

2

2

Urology

6

6

General Dentistry

1

-

Oral Surgery

4

2

Expenditures	(10/1/81 - 9/30/82)	(10/1/82 - 9/30/83)
Payroll:	\$ 4,166,142	\$ 4,770,993
Nonpayroll:	5,188,110	6,622,923
Total	\$ 9,354,252	\$ 11,393,916

Utilization Statistics	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	7,088		7,504	
Discharges (excluding newborns):				
Patients under 14 years	226	3.2%	267	3.6%
Patients 14-64 years	5,504	78.2%	5,523	73.6%
Patients over 64 years	1,307	18.6%	1,713	22.8%
Total Discharges	7,037	100.0%	7,503	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	516	1.5%	563	1.6%
Patients 14-64 years	25,351	73.3%	23,307	70.5%
Patients over 64 years	8,721	25.2%	10,023	27.9%
Total Inpatient Days of Care	34,588	100.0%	35,893	100.0%
Outpatient Visits:	3,689		4,070	
Average Length of Stay (Days)	4.92		4.78	
Average Daily Census(Inpatients/Day)	95.0		98.0	
Percent of Occupancy		69.68%		72.31%
Employees Per Patient Day	2.8		2.8	

MOREHEAD MEMORIAL HOSPITAL

Address: 117 E. Kings Highway
Eden, NC 27288

Phone: (919) 623-9711
County: Rockingham
HSA: 2
Administrative/Chief Executive:
Robert J. Dever, Acting Exec. Dir.

Type of Hospital: General
Owner/Operator: Hospital Management Professionals, Inc.
Number of Beds in Use: 133

Services Offered (10/1/82 - 9/30/83)

Inhouse Services Abortion (Inpatient) Abortion (Outpatient) Cardiac Rehabilitation Program Histopathology Laboratory Hospital Auxiliary Outpatient Ambulatory Surgery Pharmacy Full-Time Postoperative Recovery Room Rehabilitation (Outpatient) Social Work Department	Services Contracted For CAT Scan
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<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	116	110
Number of FTE Employees:	315	297
Number of Physicians and Dentists:	30	31

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
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Anesthesiology	-	1
Eye, Ear, Nose, and Throat	1	1
General/Family Practice	4	6
General Surgery	4	4
Internal Medicine	5	5
Obstetrics-Gynecology	3	3
Ophthalmology	1	1
Orthopedics	2	2
Pathology	1	1
Pediatrics	2	2
Radiology	2	2
Urology	1	1
Other Physicians	2	-
General Dentistry	2	2

Expenditures	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
Payroll:	\$		\$	4,249,903
Nonpayroll:				4,753,816
TOTAL	\$		\$	9,003,719

Utilization Statistics	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	5,427			
Discharges (excluding newborns):				
Patients under 14 years	956	16.0%	827	15.1%
Patients 14-64 years	3,634	60.6%	3,228	59.2%
Patients over 64 years	1,406	23.4%	1,401	25.7%
Total Discharges	5,996	100.0%	5,456	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	3,446	10.0%	2,878	9.0%
Patients 14-64 years	18,021	52.1%	16,007	50.1%
Patients over 64 years	13,082	37.9%	13,078	40.9%
Total Inpatient Days of Care	34,549	100.0%	31,963	100.0%
Outpatient Visits:	43,555		16,001	
Average Length of Stay (Days)			6.17	
Average Daily Census (Inpatients/Day)			82.0	
Percent of Occupancy				62.28%
Employees Per Patient Day				

Note: Morehead Memorial Hospital first became managed by an investor-owned hospital company in 1984, after this information was compiled.

ORTHOPAEDIC HOSPITAL OF CHARLOTTE

Address: 1901 Randolph Road
P.O. Box 30848
Charlotte, NC 28230

Phone: (704) 375-6792
County: Mecklenberg
HSA: 3
Administrative/Chief Executive:
William Earl Collins

Type of Hospital: Orthopedic (Specialty)
Owner/Operator: Hospital Corporation of America
Number of Beds in Use: 166

Services Offered (10/1/81 - 9/30/82)

Inhouse Services

Blood Bank
Bone Bank
Histopathology Laboratory
Metabolic Bone Laboratory
Outpatient Ambulatory Operating Rooms
Outpatient Ambulatory Recovery Room
Outpatient Ambulatory Family Waiting Room
Inpatient Operating Rooms
Inpatient Postoperative Recovery Room
Inpatient Physical Therapy
Outpatient Physical Therapy
Inservice Education
Emergency Room
Full-Time Pharmacy
Part-Time Pharmacy
Social Work Department

Services Contracted For **Anesthesiology**

Employees and Medical Staff (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Number of Administrators:	2	2
Number of Nurses:	113	117
Number of FTE Employees:	356	331
Number of Physicians and Dentists:	36	36

Medical or Dental Specialty (Number of Physicians) (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Orthopedics	36	36
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Expenditures (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Payroll:	\$ 5,039,000	\$ 5,658,612
Nonpayroll:	6,667,000	8,374,042
Total	\$11,706,000	\$14,032,654

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions	4,668		4,708	
Discharges (excluding newborns)				
Patients under 14 years	138	2.9%	190	4.0%
Patients 14-64 years	3,852	82.2%	3,714	78.5%
Patients over 64 years	696	14.9%	828	17.5%
Total Discharges	4,686	100.0%	4,732	100.0%
Inpatient Days of Care (excluding newborns)				
Patients under 14 years	720	2.0%	1,068	3.1%
Patients 14-64 years	27,011	75.0%	24,090	69.4%
Patient over 64 years	8,283	23.0%	9,540	27.5%
Total Inpatient Days of Care	36,014	100.0%	34,698	100.0%
Outpatient Visits	830		1,633	
Average Length of Stay (Days)	7.69		7.33	
Average Daily Census (Inpatient/Day)	99.0		100.0	
Percent of Occupancy		59.44%		57.27%
Employees Per Patient Day	3.6		3.50	

NOTE: The Orthopaedic Hospital of Charlotte opened in 1976 when it was converted from a nursing home by its owner, Medicensers of America Inc. In 1978 the hospital was purchased by Hospital Affiliates Inc., which in turn was purchased by Hospital Corporation of America in 1981. The hospital continues to be affiliated with Hospital Corporation of America.

PERSON COUNTY MEMORIAL HOSPITAL

Address: 615 Ridge Road
Roxboro, NC 27573

Phone: (919) 599-2121
County: Person
HSA: 4
Administrative/Chief Executive:
S. Grant Boone, Jr.

Type of Hospital: General
Owner: Person County Memorial Hospital, Inc. (a nonprofit corporation)
Operator: Hospital Corporation of America
Number of Beds in Use: 77

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Hospital Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room
Social Work Department

Services Contracted For
Blood Bank
CAT Scan
Histopathology Laboratory
Psychiatric Emergency Services
Psychiatric Outpatient Services
Speech Therapy

Employees and Medical Staff (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Number of Administrators:	1	1
Number of Nurses:	53	66
Number of FTE Employees:	162	157
Number of Physicians and Dentists:	16	14

Medical or Dental Specialty (Number of Physicians) (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

General/Family Practice	6	7
General Surgery	2	3
Internal Medicine	1	2
Obstetrics/Gynecology	1	1
Pediatrics	1	1
Radiology	3	-
General Dentistry	2	-

Expenditures (10/1/81 - 9/30/82) (10/1/82 - 9/30/83)

Payroll:	\$ 2,473,324	\$ 2,288,392
Nonpayroll:	1,454,659	1,959,468
Total	\$ 3,927,983	\$ 4,247,860

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	1,531		1,372	
Discharges (excluding newborns):				
Patients under 14 years	63	4.1%	253	16.7%
Patients 14-64 years	927	60.9%	777	51.2%
Patients over 64 years	533	35.0%	487	32.1%
Total Discharges	1,523	100.0%	1,517	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	233	2.2%	1,238	11.3%
Patients 14-64 years	4,571	43.0%	4,293	39.2%
Patients over 64 years	5,821	54.8%	5,428	49.5%
Total Inpatient Days of Care	10,625	100.0%	10,959	100.0%
Outpatient Visits:	9,380		9,412	
Average Length of Stay (Days)	6.98		7.45	
Average Daily Census (Inpatients/Day)	30.0		29.0	
Percent of Occupancy		53.91%		51.71%
Employees Per Patient Day	5.4		5.20	

RALEIGH COMMUNITY HOSPITAL

Address: 3400 Wake Forest Road
Raleigh, NC 27609

Phone: (919) 872-4800
County: Wake
HSA: 4
Administrative/Chief Executive:
Harrison T. Ferris

Type of Hospital: General
Owner/Operator: Hospital Corporation of America
Number of Beds in Use: 140

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Blood Bank
Chemotherapy
Histopathology Laboratory
Hospital Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Part-Time Pharmacy
Postoperative Recovery Room
Social Work Department

Services Contracted For
Cardiac Rehabilitation Program
Speech Therapy

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	3	20
Number of Nurses:	201	204
Number of FTE Employees:	424	433
Number of Physicians and Dentists:	183	200

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
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Anesthesiology	5	5
Dermatology	4	4
Eye, Ear, Nose and Throat	6	-
Emergency Medicine	1	4
General/Family Practice	16	17
General Surgery	30	17
Internal Medicine	42	51
Neurosurgery	2	1
Obstetrics/Gynecology	21	21
Ophthalmology	9	11
Orthopedics	16	16
Otolaryngology	-	5
Pathology	7	7
Plastic Surgery	3	3
Psychiatry (Not Neurology)	1	-
Neurology (Internal Medicine)	2	3
Radiology	3	2
Thoracic Surgery	-	14
Urology	8	11
General Dentistry	2	2
Oral Surgery	5	6

Expenditures	(10/1/81 - 9/30/82)	(10/1/82 - 9/30/83)
Payroll:	\$ 6,845,949	\$ 7,437,000
Nonpayroll:	8,065,809	10,228,456
Total	\$ 14,922,758	\$ 17,665,456

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	7,051		6,960	
Discharges (excluding newborns):				
Patients under 14 years	151	2.2%	130	1.9%
Patients 14-64 years	5,110	72.4%	4,907	70.3%
Patients over 64 years	1,794	25.4%	1,946	27.8%
Total Discharges	7,055	100.0%	6,983	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	410	0.9%	341	0.8%
Patients 14-64 years	27,405	62.7%	25,467	59.2%
Patients over 64 years	15,880	36.4%	17,176	40.0%
Total Inpatient Days of Care	43,695	100.0%	42,984	100.0%
Outpatient Visits:	25,087		26,532	
Average Length of Stay (Days)	6.19		6.16	
Average Daily Census (Inpatients/Day)	118.0		117.0	
Percent of Occupancy		85.81%		84.12%
Employees Per Patient Day	3.6		3.70	

SPRUCE PINE COMMUNITY HOSPITAL

Address: 125 Hospital Drive
Spruce Pine, NC 28777

Phone: (704) 765-4201
County: Mitchell
HSA: 1
Administrative/Chief Executive:
David W. Spangler

Type of Hospital: General
Owner: Blue Ridge Hospital System, Inc. (a nonprofit corporation)
Operator: Hospital Corporation of America
Number of Beds in Use: 92

Services Offered (10/1/82 - 9/30/83)

Inhouse Services
Blood Bank
Cardiac Rehabilitation Program
Chemotherapy
Hospital Auxiliary
Outpatient Ambulatory Surgery
Full-Time Pharmacy
Postoperative Recovery Room
Social Work Department

Services Contracted For
None

<i>Employees and Medical Staff</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Number of Administrators:	1	1
Number of Nurses:	73	71
Number of FTE Employees:	204	175
Number of Physicians and Dentists:	18	18

<i>Medical or Dental Specialty (Number of Physicians)</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Emergency Medicine	1	-
General/Family Practice	11	14
General Surgery	1	1
Internal Medicine	3	3
Pediatrics	1	-
Radiology	1	-

<i>Expenditures</i>	<i>(10/1/81 - 9/30/82)</i>	<i>(10/1/82 - 9/30/83)</i>
Payroll:	\$ 2,354,634	\$ 2,244,775
Nonpayroll:	2,801,220	2,914,986
Total	\$ 5,155,854	\$ 5,159,761

*Spruce Pine Community Hospital is the larger of two hospitals in the Blue Ridge Hospital System; the other hospital is Burnsville Hospital. The System files one joint licensure application and separate data for each individual hospital was not available.

Utilization Statistics

	(10/1/81 - 9/30/82)		(10/1/82 - 9/30/83)	
	Number	Percent	Number	Percent
Admissions:	2,852		2,591	
Discharges (excluding newborns):				
Patients under 14 years	72	2.5%	296	10.5%
Patients 14-64 years	1,593	55.8%	1,424	50.8%
Patients over 64 years	1,192	41.7%	1,085	38.7%
Total Discharges	2,857	100.0%	2,805	100.0%
Inpatient Days of Care (excluding newborns):				
Patients under 14 years	196	1.2%	741	4.9%
Patients 14-64 years	7,056	44.9%	6,209	41.3%
Patients over 64 years	8,465	53.9%	8,079	53.8%
Total Inpatient Days of Care	15,717	100.0%	15,029	100.0%
Outpatient Visits:	7,262		8,124	
Average Length of Stay (Days)	5.5		5.61	
Average Daily Census (Inpatients/Day)	43.0		40.0	
Percent of Occupancy		46.8 %		43.47%
Employee Per Patient Day	4.6		4.30	

NOTE: Blue Ridge Hospital's first I-O connection began with its signing of a management contract in July of 1982, two months before the end of the year for which most of the above FYE 1982 information was reported.

APPENDIX C

List of Diagnosis Related Groups

Chapter IV, Section 4 discusses the new Medicare Prospective Payment System, which is based on Diagnosis Related Groups. On the following pages are copies of the 468 Diagnosis Related Groups (DRG) showing the number, relative weight, geometric mean length of stay (LOS), and outlier threshold. These DRG's were published in the August 31, 1984 *Federal Register*. The federal Health Care Financing Administration continually reviews these DRG's and their attendant multipliers in attempting to reach their goal of making the Medicare payment system equitable and cost effective. Congress, the U.S. Department of Health and Human Services, and the Health Care Financing Administration are continuing to implement the Prospective Payment System to apply to more health care providers, to include payments to hospitals for capital expenditures, and to readjust the already established DRG's for hospital services.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE HEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE HEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
1	1 SURG	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA	3.3199	19.4	41
2	1 SURG	CRANIOTOMY FOR TRAUMA AGE >17	3.2488	15.8	38
3	1 SURG	CRANIOTOMY AGE <18	2.9183	12.7	35
4	1 SURG	SPINAL PROCEDURES	2.2219	16.0	38
5	1 SURG	EXTRACRANIAL VASCULAR PROCEDURES	1.6606	9.8	31
6	1 SURG	CARPAL TUNNEL RELEASE	.3952	2.6	8
7	1 SURG	PERIPH * CRANIAL NERVE * OTHER NERV SYST PROC AGE >69 *OR C.C.	1.6172	5.3	27
8	1 SURG	PERIPH * CRANIAL NERVE * OTHER NERV SYST PROC AGE <70 W/O C.C.	.7164	4.1	23
9	1 MED	SPINAL DISORDERS * INJURIES	1.3813	9.1	31
10	1 MED	NERVOUS SYSTEM NEOPLASMS AGE >69 AND/OR C.C.	1.2951	9.6	32
11	1 MED	NERVOUS SYSTEM NEOPLASMS AGE <70 W/O C.C.	1.2415	8.5	31
12	1 MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	1.1020	9.4	31
13	1 MED	MULTIPLE SCLEROSIS * CEREBELLAR ATAXIA	1.0045	8.9	31
14	1 MED	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	1.3386	9.9	32
15	1 MED	TRANSIENT ISCHEMIC ATTACKS	.6604	5.6	24
16	1 MED	NONSPECIFIC CEREBROVASCULAR DISORDERS WITH C.C.	.8503	7.0	29
17	1 MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O C.C.	.8305	7.2	29
18	1 MED	CRANIAL * PERIPHERAL NERVE DISORDERS AGE >69 AND/OR C.C.	.7833	6.6	29
19	1 MED	CRANIAL * PERIPHERAL NERVE DISORDERS AGE <70 W/O C.C.	.6903	5.7	28
20	1 MED	NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS	1.3004	7.6	30
21	1 MED	VIRAL MENINGITIS	.6236	4.5	15
22	1 MED	HYPERTENSIVE ENCEPHALOPATHY	.7787	6.4	28
23	1 MED	NONTRAUMATIC STUPOR * COMA	1.1448	5.9	28
24	1 MED	SEIZURE * HEADACHE AGE >69 AND/OR C.C.	.7203	5.6	26
25	1 MED	SEIZURE * HEADACHE AGE 18-69 W/O C.C.	.6326	4.9	25
26	1 MED	SEIZURE * HEADACHE AGE 0-17	.4304	3.3	13
27	1 MED	* TRAUMATIC STUPOR * COMA * COMA >1 HR	1.1250	4.1	26
28	1 MED	* TRAUMATIC STUPOR * COMA, COMA <1 HR AGE >69 AND/OR C.C.	1.0590	5.9	28
29	1 MED	* TRAUMATIC STUPOR * COMA <1 HR AGE 18-69 W/O C.C.	.7100	3.8	25
30	1 MED	* TRAUMATIC STUPOR * COMA <1 HR AGE 0-17	.3539	2.0	8
31	1 MED	CONCUSSION AGE >69 AND/OR C.C.	.5988	4.6	27
32	1 MED	CONCUSSION AGE 18-69 W/O C.C.	.4472	3.3	19
33	1 MED	CONCUSSION AGE 0-17	.2457	1.6	5
34	1 MED	OTHER DISORDERS OF NERVOUS SYSTEM AGE >69 AND/OR C.C.	.9824	7.1	29
35	1 MED	OTHER DISORDERS OF NERVOUS SYSTEM AGE <70 W/O C.C.	.8372	6.2	28
36	2 SURG	RETINAL PROCEDURES	.7019	5.0	15
37	2 SURG	ORBITAL PROCEDURES	.5571	3.4	11
38	2 SURG	PRIMARY IRIS PROCEDURES	.4280	3.0	9
39	2 SURG	LENS PROCEDURES	.4958	2.8	6
40	2 SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	.3936	2.4	7
41	2 SURG	* EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0-17	.3657	1.6	4
42	2 SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA * IRIS * LENS	.5845	3.8	12
43	2 MED	* HYPERHIA	.3788	4.2	12
44	2 MED	ACUTE MAJOR EYE INFECTIONS	.6233	6.5	22
45	2 MED	NEUROLOGICAL EYE DISORDERS	.5582	4.3	18

* HEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

*** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
46	2 MED	OTHER DISORDERS OF THE EYE AGE >17 WITH C.C.	.5902	4.1	23
47	2 MED	OTHER DISORDERS OF THE EYE AGE >17 W/O C.C.	.5011	3.0	12
48	2 MED	OTHER DISORDERS OF THE EYE AGE 0-17	.4018	2.9	13
49	3 SURG	MAJOR HEAD + NECK PROCEDURES	2.5007	13.6	36
50	3 SURG	SIALOADENECTOMY	.67086	4.6	14
51	3 SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	.6632	4.2	15
52	3 SURG	CLEFT LIP + PALATE REPAIR	.6421	3.8	11
53	3 SURG	SINUS + MASTOID PROCEDURES AGE >17	.5834	3.5	11
54	3 SURG	SINUS + MASTOID PROCEDURES AGE 0-17	.6889	3.2	11
55	3 SURG	MISCELLANEOUS EAR, NOSE + THROAT PROCEDURES	.4110	2.5	7
56	3 SURG	RHINOPLASTY	.4101	2.8	8
57	3 SURG	* T+A PROC EXCEPT TONSILLECTOMY +/OR ADENOIDECTOMY ONLY, AGE >17	.5196	2.7	9
58	3 SURG	* T+A PROC EXCEPT TONSILLECTOMY +/OR ADENOIDECTOMY ONLY, AGE 0-17	.3097	1.5	3
59	3 SURG	* TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY AGE >17	.3114	2.0	4
60	3 SURG	* TONSILLECTOMY AND/OR ADENOIDECTOMY ONLY AGE 0-17	.2616	1.5	3
61	3 SURG	* MYRINGOTOMY AGE >17	.4229	2.1	9
62	3 SURG	* MYRINGOTOMY AGE 0-17	.3089	1.3	3
63	3 SURG	OTHER EAR, NOSE + THROAT O.R. PROCEDURES	1.0975	5.8	28
64	3 MED	EAR, NOSE + THROAT MALIGNANCY	1.0700	5.7	28
65	3 MED	DYSEQUILIBRIUM	.4807	4.6	17
66	3 MED	EPISTAXIS	.4073	3.7	15
67	3 MED	* EPIGLOTTITIS	.6692	4.3	17
68	3 MED	OTITIS MEDIA + URI AGE >69 AND/OR C.C.	.6224	6.0	22
69	3 MED	OTITIS MEDIA + URI AGE 18-69 W/O C.C.	.5361	4.8	19
70	3 MED	* OTITIS MEDIA + URI AGE 0-17	.3659	3.1	10
71	3 MED	* LARYNGOTRACHEITIS	.3552	2.9	9
72	3 MED	NASAL TRAUMA + DEFORMITY	.4807	3.8	18
73	3 MED	OTHER EAR, NOSE + THROAT DIAGNOSES AGE >17	.5163	3.5	17
74	3 MED	* OTHER EAR, NOSE + THROAT DIAGNOSES AGE 0-17	.3427	2.1	9
75	4 SURG	MAJOR CHEST PROCEDURES	2.5773	14.4	36
76	4 SURG	O.R. PROC ON THE RESP SYSTEM EXCEPT MAJOR CHEST WITH C.C.	1.8539	10.6	33
77	4 SURG	O.R. PROC ON THE RESP SYSTEM EXCEPT MAJOR CHEST W/O C.C.	1.7989	9.5	32
78	4 MED	PULMONARY EMBOLISM	1.3949	10.4	32
79	4 MED	RESPIRATORY INFECTIONS + INFLAMMATIONS AGE >69 AND/OR C.C.	1.7795	11.2	33
80	4 MED	RESPIRATORY INFECTIONS + INFLAMMATIONS AGE 18-69 W/O C.C.	1.7264	10.9	33
81	4 MED	* RESPIRATORY INFECTIONS + INFLAMMATIONS AGE 0-17	.8652	6.1	28
82	4 MED	RESPIRATORY NEOPLASMS	1.1282	7.4	29
83	4 MED	MAJOR CHEST TRAUMA AGE >69 AND/OR C.C.	.9707	8.1	30
84	4 MED	* MAJOR CHEST TRAUMA AGE <70 W/O C.C.	.7658	5.3	22
85	4 MED	PLEURAL EFFUSION AGE >69 AND/OR C.C.	1.1342	8.4	30
86	4 MED	PLEURAL EFFUSION AGE <70 W/O C.C.	1.1100	7.6	30
87	4 MED	PULMONARY EDEMA + RESPIRATORY FAILURE	1.5368	7.7	30
88	4 MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1.0304	7.5	30
89	4 MED	SIMPLE PNEUMONIA + PLEURISY AGE >69 AND/OR C.C.	1.0914	8.5	31
90	4 MED	SIMPLE PNEUMONIA + PLEURISY AGE 18-69 W/O C.C.	.9747	7.6	29

* MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

*** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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TABLE 5 Page 3 of 11

LIST OF DIAGNOSIS RELATED GROUPS (DRGS)° RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	HDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
91	4 MED	° SIMPLE PNEUMONIA ° PLEURISY AGE 0-17	.5078	4.6	14
92	4 MED	° INTERSTITIAL LUNG DISEASE AGE >69 AND/OR C.C.	1.0262	7.8	30
93	4 MED	° INTERSTITIAL LUNG DISEASE AGE <70 W/O C.C.	.9623	6.9	29
94	4 MED	° PNEUMOTHORAX AGE >69 AND/OR C.C.	1.4225	9.2	31
95	4 MED	° PNEUMOTHORAX AGE <70 W/O C.C.	1.1135	7.7	30
96	4 MED	° BRONCHITIS ° ASTHMA AGE >69 AND/OR C.C.	.7913	6.9	24
97	4 MED	° BRONCHITIS ° ASTHMA AGE 18-69 W/O C.C.	.7181	6.2	21
98	4 MED	° BRONCHITIS ° ASTHMA AGE 0-17	.4231	3.7	11
99	4 MED	° RESPIRATORY SIGNS ° SYMPTOMS AGE >69 AND/OR C.C.	.7952	5.5	27
100	4 MED	° RESPIRATORY SIGNS ° SYMPTOMS AGE <70 W/O C.C.	.7650	5.1	24
101	4 MED	° OTHER RESPIRATORY DIAGNOSES AGE >69 AND/OR C.C.	.8941	6.8	29
102	4 MED	° OTHER RESPIRATORY DIAGNOSES AGE <70	.8930	6.1	28
103	5 SURG	° HEART TRANSPLANT	.0000	.0	0
104	5 SURG	° CARDIAC VALVE PROCEDURE WITH PUMP ° WITH CARDIAC CATH	6.7815	20.9	43
105	5 SURG	° CARDIAC VALVE PROCEDURE WITH PUMP ° W/O CARDIAC CATH	5.1764	16.2	38
106	5 SURG	° CORONARY BYPASS WITH CARDIAC CATH	5.2077	20.4	42
107	5 SURG	° CORONARY BYPASS W/O CARDIAC CATH	3.9476	13.5	35
108	5 SURG	° CARDIOTHORACIC PROCEDURE VALVE ° CORONARY BYPASS WITH PUMP	4.3301	13.3	35
109	5 SURG	° CARDIOTHORACIC PROCEDURES W/O PUMP	3.6579	12.1	34
110	5 SURG	° MAJOR RESTRUCTIVE VASCULAR PROCEDURES AGE >69 AND/OR C.C.	2.8023	14.3	36
111	5 SURG	° MAJOR RESTRUCTIVE VASCULAR PROCEDURES AGE <70 W/O C.C.	2.5582	13.2	35
112	5 SURG	° VASCULAR PROCEDURES EXCEPT MAJOR RECONSTRUCTION	2.3256	11.2	33
113	5 SURG	° AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB ° TOE	2.6522	21.6	44
114	5 SURG	° UPPER LIMB ° TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	2.0848	16.6	39
115	5 SURG	° PERMANENT CARDIAC PACEMAKER IMPLANT WITH AMI OR CHF	3.8743	15.8	38
116	5 SURG	° PERMANENT CARDIAC PACEMAKER IMPLANT W/O AMI OR CHF	2.8367	9.3	31
117	5 SURG	° CARDIAC PACEMAKER REPLACE ° REVIS EXC PULSE GEN REPL ONLY	1.8021	6.4	28
118	5 SURG	° CARDIAC PACEMAKER PULSE GENERATOR REPLACEMENT ONLY	1.7624	4.2	18
119	5 SURG	° VEIN LIGATION ° STRIPPING	1.0500	7.2	29
120	5 SURG	° OTHER OR. PROCEDURES ON THE CIRCULATORY SYSTEM	2.4942	15.0	37
121	5 MED	°° CIRCULATORY DISORDERS WITH AMI ° C.V. COMP. DISCH. ALIVE	1.8454	11.9	34
122	5 MED	°° CIRCULATORY DISORDERS WITH AMI W/O C.V. COMP. DISCH. ALIVE	1.3509	9.8	32
123	5 MED	° CIRCULATORY DISORDERS WITH AMI, EXPIRED	1.1242	3.1	25
124	5 MED	° CIRCULATORY DISORDERS EXC AMI WITH CARD CATH ° COMPLEX DIAG	2.1969	8.4	30
125	5 MED	° CIRCULATORY DISORDERS EXC AMI WITH CARD CATH W/O COMPLEX DIAG	1.6284	5.0	27
126	5 MED	° ACUTE ° SUBACUTE ENDOCARDITIS	2.6368	18.4	40
127	5 MED	° HEART FAILURE ° SHOCK	1.0300	7.8	30
128	5 MED	° DEEP VEIN THROMBOPHLEBITIS	.8549	9.6	28
129	5 MED	° CARDIAC ARREST, UNEXPLAINED	1.5345	4.6	27
130	5 MED	° PERIPHERAL VASCULAR DISORDERS AGE >69 AND/OR C.C.	.9545	7.1	29
131	5 MED	° PERIPHERAL VASCULAR DISORDERS AGE <70 W/O C.C.	.9392	6.4	28
132	5 MED	° ATHEROSCLEROSIS AGE >69 AND/OR C.C.	.9087	6.7	29
133	5 MED	° ATHEROSCLEROSIS AGE <70 W/O C.C.	.8510	5.2	25
134	5 MED	° HYPERTENSION	.6976	6.1	26
135	5 MED	° CARDIAC CONGENITAL ° VALVULAR DISORDERS AGE >69 AND/OR C.C.	.5819	6.1	28

° MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.
 °° DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.
 °°° DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
136	5 MED	CARDIAC CONGENITAL + VALVULAR DISORDERS AGE 18-69 W/O C.C.	.9573	4.9	27
137	5 MED	* CARDIAC CONGENITAL + VALVULAR DISORDERS AGE 0-17	.6315	3.3	20
138	5 MED	CARDIAC ARRHYTHMIA + CONDUCTION DISORDERS AGE >69 AND/OR C.C.	.9200	5.7	27
139	5 MED	CARDIAC ARRHYTHMIA + CONDUCTION DISORDERS AGE <70 W/O C.C.	.8217	4.8	23
140	5 MED	ANGINA PECTORIS	.7470	5.5	21
141	5 MED	SYNCOPE + COLLAPSE AGE >69 AND/OR C.C.	.6408	5.0	21
142	5 MED	SYNCOPE + COLLAPSE AGE <70 W/O C.C.	.5621	4.3	18
143	5 MED	CHEST PAIN	.6743	4.4	19
144	5 MED	OTHER CIRCULATORY DIAGNOSES WITH C.C.	1.1150	7.0	29
145	5 MED	OTHER CIRCULATORY DIAGNOSES W/O C.C.	.9916	6.4	28
146	6 SURG	RECTAL RESECTION AGE >69 AND/OR C.C.	2.6801	19.1	41
147	6 SURG	RECTAL RESECTION AGE <70 W/O C.C.	2.4826	17.9	40
148	6 SURG	MAJOR SMALL + LARGE BOWEL PROCEDURES AGE >69 AND/OR C.C.	2.5228	17.0	39
149	6 SURG	MAJOR SMALL + LARGE BOWEL PROCEDURES AGE <70 W/O C.C.	2.1924	15.2	37
150	6 SURG	PERITONEAL ADHESICLYSIS AGE >69 AND/OR C.C.	2.3499	15.3	37
151	6 SURG	PERITONEAL ADHESICLYSIS AGE <70 W/O C.C.	2.0063	13.4	35
152	6 SURG	MINOR SMALL + LARGE BOWEL PROCEDURES AGE >69 AND/OR C.C.	1.4697	10.6	33
153	6 SURG	MINOR SMALL + LARGE BOWEL PROCEDURES AGE <70 W/O C.C.	1.2468	9.3	31
154	6 SURG	STOMACH, ESOPHAGEAL + DUODENAL PROCEDURES AGE >69 AND/OR C.C.	2.6621	14.8	37
155	6 SURG	STOMACH, ESOPHAGEAL + DUODENAL PROCEDURES AGE 18-69 W/O C.C.	2.3094	13.0	35
156	6 SURG	* STOMACH, ESOPHAGEAL + DUODENAL PROCEDURES AGE 0-17	.8382	6.0	20
157	6 SURG	ANAL PROCEDURES AGE >69 AND/OR C.C.	.7902	6.0	25
158	6 SURG	ANAL PROCEDURES AGE <70 W/O C.C.	.6341	5.2	19
159	6 SURG	HERNIA PROCEDURES EXCEPT INGUINAL + FEMORAL AGE >69 AND/OR C.C.	.9200	7.1	23
160	6 SURG	HERNIA PROCEDURES EXCEPT INGUINAL + FEMORAL AGE 18-69 W/O C.C.	.7596	6.0	18
161	6 SURG	INGUINAL + FEMORAL HERNIA PROCEDURES AGE >69 AND/OR C.C.	.6995	5.7	16
162	6 SURG	INGUINAL + FEMORAL HERNIA PROCEDURES AGE 18-69 W/O C.C.	.5793	4.8	12
163	6 SURG	* HERNIA PROCEDURES AGE --17	.4313	2.1	6
164	6 SURG	APPENDECTOMY WITH COMPLICATED PRINC. DIAG AGE >69 AND/OR C.C.	1.8130	11.9	33
165	6 SURG	APPENDECTOMY WITH COMPLICATED PRINC. DIAG AGE <70 W/O C.C.	1.5986	11.3	29
166	6 SURG	APPENDECTOMY W/O COMPLICATED PRINC. DIAG AGE >69 AND/OR C.C.	1.4179	9.4	29
167	6 SURG	APPENDECTOMY W/O COMPLICATED PRINC. DIAG AGE <70 W/O C.C.	1.0706	7.4	22
168	6 SURG	PROCEDURES ON THE MOUTH AGE >59 AND/OR C.C.	.8541	4.3	25
169	6 SURG	PROCEDURES ON THE MOUTH AGE <70 W/O C.C.	.8899	4.2	26
170	6 SURG	OTHER DIGESTIVE SYSTEM PROCEDURES AGE >69 AND/OR C.C.	2.6326	14.6	37
171	6 SURG	OTHER DIGESTIVE SYSTEM PROCEDURES AGE <70 W/O C.C.	2.3727	13.3	35
172	6 MED	DIGESTIVE MALIGNANCY AGE >69 AND/OR C.C.	1.2141	8.2	30
173	6 MED	DIGESTIVE MALIGNANCY AGE <70 W/O C.C.	1.0408	6.7	29
174	6 MED	G.I. HEMORRHAGE AGE >69 AND/OR C.C.	.9185	6.7	29
175	6 MED	G.I. HEMORRHAGE AGE <70 W/O C.C.	.8150	5.8	24
176	6 MED	COMPLICATED PEPTIC ULCER	1.2309	8.1	30
177	6 MED	UNCOMPLICATED PEPTIC ULCER >69 AND/OR C.C.	.7345	6.6	24
178	6 MED	UNCOMPLICATED PEPTIC ULCER <70 W/O C.C.	.6077	5.5	20
179	6 MED	INFLAMMATORY BOWEL DISEASE	1.0048	8.0	30
180	6 MED	G.I. OBSTRUCTION AGE >69 AND/OR C.C.	.8112	6.2	28

* MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

*** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE HEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
181	6 MED	G.I. OBSTRUCTION AGE <70 W/O C.C.	.7763	5.9	28
182	6 MED	ESOPHAGITIS-GASTROENT. MISC. DIGEST. DIS AGE >69 ~ /OR C.C.	.6121	5.0	22
183	6 MED	ESOPHAGITIS-GASTROENTERITIS MISC. DIGEST. DIS AGE 18-69 W/O C.C.	.5593	4.8	19
184	6 MED	ESOPHAGITIS-GASTROENTERITIS MISC. DIGEST. DISORDERS AGE 0-17	.3782	3.3	11
185	6 MED	DENTAL ORAL DIS. EXC EXTRACTIONS ~ RESTORATIONS AGE >17	.6612	4.2	26
186	6 MED	DENTAL ORAL DIS. EXC EXTRACTIONS ~ RESTORATIONS AGE 0-17	.4112	2.9	11
187	6 MED	DENTAL EXTRACTIONS ~ RESTORATIONS	.3949	2.7	8
188	6 MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >69 AND/OR C.C.	.7367	5.1	27
189	6 MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 18-69 W/O C.C.	.6508	4.5	23
190	6 MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	.3344	2.1	8
191	7 SURG	MAJOR PANCREAS LIVER ~ SHUNT PROCEDURES	.41357	20.8	43
192	7 SURG	MINOR PANCREAS LIVER ~ SHUNT PROCEDURES	.308790	20.1	42
193	7 SURG	BILIARY TRACT PROC EXC TOT CHOLECYSTECTOMY AGE >69 ~ /OR C.C.	2.0258	17.3	39
194	7 SURG	BILIARY TRACT PROC EXC TOT CHOLECYSTECTOMY AGE <70 W/O C.C.	1.9674	13.9	36
195	7 SURG	TOTAL CHOLECYSTECTOMY WITH C.O.D.E. AGE >69 AND/OR C.C.	2.1465	16.0	38
196	7 SURG	TOTAL CHOLECYSTECTOMY WITH C.O.D.E. AGE <70 W/O C.C.	2.0380	15.8	38
197	7 SURG	TOTAL CHOLECYSTECTOMY W/O C.O.D.E. AGE >69 AND/OR C.C.	1.4714	11.5	29
198	7 SURG	TOTAL CHOLECYSTECTOMY W/O C.O.D.E. AGE <70 W/O C.C.	1.2619	10.1	24
199	7 SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	2.4319	17.9	40
200	7 SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	2.5550	15.1	37
201	7 SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	2.7007	16.9	39
202	7 MED	CIRRHOSIS ~ ALCOHOLIC HEPATITIS	1.1841	9.3	31
203	7 MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS	1.0823	8.0	30
204	7 MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	.9581	7.5	30
205	7 MED	DISORDERS OF LIVER EXC HALIG.CIRRH.ALC HEPA AGE >69 AND/OR C.C.	1.0710	7.9	30
206	7 MED	DISORDERS OF LIVER EXC HALIG.CIRRH.ALC HEPA AGE <70 W/O C.C.	.9151	6.8	29
207	7 MED	DISORDERS OF THE BILIARY TRACT AGE >69 AND/OR C.C.	.8404	6.6	28
208	7 MED	DISORDERS OF THE BILIARY TRACT AGE <70 W/O C.C.	.7239	5.5	24
209	8 SURG	MAJOR JOINT PROCEDURES	2.2674	17.1	39
210	8 SURG	HIP ~ FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >69 AND/OR C.C.	2.0617	17.8	40
211	8 SURG	HIP ~ FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 18-69 W/O C.C.	1.9327	15.9	38
212	8 SURG	HIP ~ FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	1.6954	11.1	33
213	8 SURG	AMPUTATIONS FOR MUSCULOSKELETAL SYSTEM ~ CONN. TISSUE DISORDERS	2.1094	14.3	36
214	8 SURG	BACK ~ NECK PROCEDURES AGE >69 AND/OR C.C.	1.8236	15.6	38
215	8 SURG	BACK ~ NECK PROCEDURES AGE <70 W/O C.C.	1.4735	13.0	35
216	8 SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM ~ CONNECTIVE TISSUE	1.5434	11.3	33
217	8 SURG	WOUND DEBRID ~ SKIN GRAFT EXC HAND-FOUR MUSCULOSKELETAL ~ CONN.TISS.DIS	2.2587	13.1	35
218	8 SURG	LOWER EXTREM ~ HUMER PROC EXC HIP.FOOT.FEMUR AGE >69 ~ /OR C.C.	1.4102	10.9	33
219	8 SURG	LOWER EXTREM ~ HUMER PROC EXC HIP.FOOT.FEMUR AGE 18-69 W/O C.C.	1.0678	8.3	27
220	8 SURG	LOWER EXTREM ~ HUMER PROC EXC HIP.FOOT.FEMUR AGE 0-17	.9242	5.3	25
221	9 SURG	KNEE PROCEDURES AGE >69 AND/OR C.C.	1.2595	9.3	30
222	9 SURG	KNEE PROCEDURES AGE <70 W/O C.C.	.9794	6.4	28
223	8 SURG	UPPER EXTREMITY PROC EXC HUMERUS ~ HAND AGE >69 AND/OR C.C.	1.0612	6.9	29
224	8 SURG	UPPER EXTREMITY PROC EXC HUMERUS ~ HAND AGE <70 W/O C.C.	.8859	5.6	24
225	8 SURG	FOOT PROCEDURES	.6409	4.8	15

• MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

•• DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

••• DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
226	8 SURG	SOFT TISSUE PROCEDURES AGE >69 AND/OR C.C.	.7901	5.1	27
227	8 SURG	SOFT TISSUE PROCEDURES AGE <70 W/O C.C.	.6271	4.2	18
228	8 SURG	GANGLION (HAND) PROCEDURES	.3588	2.2	7
229	8 SURG	HAND PROCEDURES EXCEPT GANGLION	.5936	3.4	14
230	8 SURG	LOCAL EXCISION + REMOVAL OF INT FIX DEVICES OF HIP + FEMUR	1.3453	8.9	31
231	8 SURG	LOCAL EXCISION + REMOVAL OF INT FIX DEVICES EXCEPT HIP + FEMUR	.9420	5.3	27
232	8 SURG	ARTHROSCOPY	.6000	3.6	15
233	8 SURG	OTHER MUSCULOSKELET SYS + CONN TISS O.R. PROC AGE >69 +/OR C.C.	1.7553	13.1	35
234	8 SURG	OTHER MUSCULOSKELET SYS + CONN TISS O.R. PROC AGE <70 W/O C.C.	1.2325	8.2	30
235	8 MED	FRACTURES OF FEMUR	1.7403	13.6	36
236	8 MED	FRACTURES OF HIP + PELVIS.	1.3711	11.9	34
237	8 MED	SPRAINS, STRAINS, + DISLOCATIONS OF HIP, PELVIS + THIGH	.7847	6.4	28
238	8 MED	OSTEOMYELITIS	1.5350	12.3	34
239	8 MED	PATHOLOGICAL FRACTURES + MUSCULOSKELETAL + CONN.TISS.MALIGNANCY	1.0865	9.2	31
240	8 MED	CONNECTIVE TISSUE DISORDERS AGE >69 AND/OR C.C.	.9608	8.6	31
241	8 MED	CONNECTIVE TISSUE DISORDERS AGE <70 W/O C.C.	.8954	8.0	30
242	8 MED	SEPTIC ARTHRITIS	1.5715	11.2	33
243	8 MED	MEDICAL BACK PROBLEMS	.7473	7.5	30
244	8 MED	BONE DISEASES + SEPTIC ARTHROPATHY AGE >69 AND/OR C.C.	.7711	7.5	30
245	8 MED	BONE DISEASES + SEPTIC ARTHROPATHY AGE <70 W/O C.C.	.7102	6.3	28
246	8 MED	NON-SPECIFIC ARTHROPATHIES	.7073	6.8	28
247	8 MED	SIGNS + SYMPTOMS OF MUSCULOSKELETAL SYSTEM + CONN TISSUE	.6491	5.8	27
248	8 MED	TENDONITIS, MYOSITIS + BURSITIS	.6072	5.4	24
249	8 MED	AFTERCARE, MUSCULOSKELETAL SYSTEM + CONNECTIVE TISSUE	1.0097	7.6	30
250	8 MED	FX,SPRNS,STRNS + DISL OF FOREARM,HAND,FOOT AGE >69 +/OR C.C.	.7351	6.0	28
251	8 MED	FX,SPRNS,STRNS + DISL OF FOREARM,HAND,FOOT AGE 18-69 W/O C.C.	.5902	4.2	26
252	8 MED	FX,SPRNS,STRNS + DISL OF FOREARM,HAND,FOOT AGE 0-17	.3496	1.8	7
253	8 MED	FX,SPRNS,STRNS + DISL OF UPARM,LOWLEG EX FOOT AGE >69 +/OR C.C.	.7388	6.6	29
254	8 MED	FX,SPRNS,STRNS + DISL OF UPARM,LOWLEG EX FOOT AGE 18-69 W/O C.C.	.6193	5.3	27
255	8 MED	FX,SPRNS,STRNS + DISL OF UPARM,LOWLEG EX FOOT AGE 0-17	.4638	2.9	15
256	8 MED	OTHER DIAGNOSES OF MUSCULOSKELETAL SYSTEM + CONNECTIVE TISSUE	.8616	6.5	29
257	9 SURG	TOTAL MASTECTOMY FOR MALIGNANCY AGE >69 AND/OR C.C.	1.0970	9.3	23
258	9 SURG	TOTAL MASTECTOMY FOR MALIGNANCY AGE <70 W/O C.C.	1.0618	8.9	21
259	9 SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY AGE >69 AND/OR C.C.	1.0036	7.4	29
260	9 SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY AGE <70	.9228	6.4	27
261	9 SURG	BREAST PROC FOR NON-MALIG EXCEPT BIOPSY + LOC EXC	.7253	4.8	19
262	9 SURG	BREAST BIOPSY + LOCAL EXCISION FOR NON-MALIGNANCY	.4569	3.0	10
263	9 SURG	SKIN GRAFTS FOR SKIN ULCER OR CELLULITIS AGE >69 AND/OR C.C.	2.4480	21.3	43
264	9 SURG	SKIN GRAFTS FOR SKIN ULCER OR CELLULITIS AGE <70 W/O C.C.	2.1802	18.2	40
265	9 SURG	* SKIN GRAFTS EXCEPT FOR SKIN ULCER OR CELLULITIS WITH C.C.	1.4804	8.6	31
266	9 SURG	SKIN GRAFTS EXCEPT FOR SKIN ULCER OR CELLULITIS W/O C.C.	.9386	5.9	28
267	9 SURG	PERIANAL + PILONIDAL PROCEDURES	.6049	5.0	18
268	9 SURG	SKIN,SUBCUTANEOUS TISSUE + BREAST PLASTIC PROCEDURES	.5332	3.0	15
269	9 SURG	OTHER SKIN, SUBCUT TISS + BREAST O.R. PROC AGE >69 +/OR C.C.	.9844	5.7	28
270	9 SURG	OTHER SKIN, SUBCUT TISS + BREAST O.R. PROC AGE <70 W/O C.C.	.8039	4.5	27

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*** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS)° RELATIVE HEIGHTING FACTORS° GEOMETRIC MEAN LENGTH OF STAY° AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	HDC	Y TITLE	RELATIVE HEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
271	9 HED	SKIN ULCERS	1.3659	12.1	34
272	9 HED	HAJOR SKIN DISORDERS AGE >69 AND/OR C.C.	.8530	7.8	30
273	9 HED	HAJOR SKIN DISORDERS AGE <70 W/O C.C.	.8200	7.3	29
274	9 HED	MALIGNANT BREAST DISORDERS AGE >69 AND/OR C.C.	1.0003	7.5	30
275	9 HED	MALIGNANT BREAST DISORDERS AGE <70 W/O C.C.	.8920	6.4	28
276	9 HED	NON-MALIGNANT BREAST DISORDERS	.6003	4.2	22
277	9 HED	CELLULITIS AGE >69 AND/OR C.C.	.8771	8.3	30
278	9 HED	CELLULITIS AGE 18-69 W/O C.C.	.8012	7.2	29
279	9 HED	CELLULITIS AGE 0-17	.4739	4.2	13
280	9 HED	TRAUMA TO THE SKIN° SUBCUT TISS ° BREAST AGE >69 °/OR C.C.	.6137	5.4	27
281	9 HED	TRAUMA TO THE SKIN° SUBCUT TISS ° BREAST AGE 18-69 W/O C.C.	.5321	4.2	23
282	9 HED	TRAUMA TO THE SKIN° SUBCUT TISS ° BREAST AGE 0-17	.3424	2.2	9
283	9 HED	MINOR SKIN DISORDERS AGE >69 AND/OR C.C.	.6328	5.3	27
284	9 HED	MINOR SKIN DISORDERS AGE <70 W/O C.C.	.5909	4.4	24
285	10 SURG.	AMPUTATIONS FOR ENDOCRINE/NUTRITIONAL ° METABOLIC DISORDERS	2.8360	24.0	46
286	10 SURG.	ADRENAL ° PITUITARY PROCEDURES	2.8651	16.1	38
287	10 SURG.	SKIN GRAFTS ° WOUND DEBRIDE FOR ENDOCRINUTRIT ° METAB DISORDERS	2.7851	22.8	45
288	10 SURG.	O.R. PROCEDURES FOR OBESITY	1.5532	10.0	24
289	10 SURG.	PARATHYROID PROCEDURES	1.3593	8.3	29
290	10 SURG.	THYROID PROCEDURES	.8460	6.0	17
291	10 SURG.	THYROID GLAND PROCEDURES	.4858	2.9	8
292	10 SURG.	OTHER ENDOCRINE° NUTRIT ° METAB O.R. PROC AGE > 69 °/OR C.C.	2.0096	10.8	33
293	10 SURG.	OTHER ENDOCRINE° NUTRIT ° METAB O.R. PROC AGE <70 W/O C.C.	1.4796	8.0	30
294	10 HED	DIABETES AGE ≥36	.8003	7.7	30
295	10 HED	DIABETES AGE 0-35	.7380	5.6	26
296	10 HED	NUTRITIONAL ° MISC. METABOLIC DISORDERS AGE >69 AND/OR C.C.	.8886	7.3	29
297	10 HED	NUTRITIONAL ° MISC. METABOLIC DISORDERS AGE 18-69 W/O C.C.	.7841	6.0	28
298	10 HED	NUTRITIONAL ° MISC. METABOLIC DISORDERS AGE 0-17	.7460	5.4	26
299	10 HED	INBORN ERRORS OF METABOLISM	.9309	6.8	29
300	10 HED	ENDOCRINE DISORDERS AGE >69 AND/OR C.C.	.9630	7.8	30
301	10 HED	ENDOCRINE DISORDERS AGE <70 W/O C.C.	.8058	6.4	28
302	11 SURG	KIDNEY TRANSPLANT	.4.1840	24.1	46
303	11 SURG	KIDNEY°URETER ° HAJOR BLADDER PROCEDURE FOR NEOPLASM	2.5133	16.2	38
304	11 SURG	KIDNEY°URETER ° HAJ BLDR PROC FOR NON-MALIG AGE >69 °/OR C.C.	1.7765	12.8	35
305	11 SURG	KIDNEY°URETER ° HAJ BLDR PROC FOR NON-MALIG AGE <70 W/O C.C.	1.6866	11.9	34
306	11 SURG	PROSTATECTOMY AGE >69 AND/OR C.C.	1.1281	8.6	30
307	11 SURG	PROSTATECTOMY AGE <70 W/O C.C.	.9414	7.2	26
308	11 SURG	MINOR BLADDER PROCEDURES AGE >69 AND/OR C.C.	1.0333	7.1	29
309	11 SURG	MINOR BLADDER PROCEDURES AGE <70 W/O C.C.	.9193	5.7	28
310	11 SURG	TRANSURETHRAL PROCEDURES AGE >69 AND/OR C.C.	.6998	4.9	20
311	11 SURG	TRANSURETHRAL PROCEDURES AGE <70 W/O C.C.	.5810	4.1	15
312	11 SURG	URETHRAL PROCEDURES° AGE >69 AND/OR C.C.	.7347	5.2	22
313	11 SURG	URETHRAL PROCEDURES° AGE 18-69 W/O C.C.	.6825	5.1	21
314	11 SURG	URETHRAL PROCEDURES° AGE 0-17	.4323	2.3	11
315	11 SURG	OTHER KIDNEY ° URINARY TRACT O.R. PROCEDURES	2.4625	9.8	32

° HEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.
 °° DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.
 °°° DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
316	11 MED	RENAL FAILURE	1.3176	6.7	29
317	11 MED	* ADMIT FOR RENAL DIALYSIS	.2360	1.2	3
318	11 MED	KIDNEY + URINARY TRACT NEOPLASMS AGE >69 AND/OR C.C.	.9047	5.5	28
319	11 MED	KIDNEY + URINARY TRACT NEOPLASMS AGE <70 W/O C.C.	.7859	4.2	26
320	11 MED	KIDNEY + URINARY TRACT INFECTIONS AGE >69 AND/OR C.C.	.8039	7.0	29
321	11 MED	KIDNEY + URINARY TRACT INFECTIONS AGE 18-69 W/O C.C.	.6732	5.6	23
322	11 MED	* KIDNEY + URINARY TRACT INFECTIONS AGE 0-17	.4506	3.7	13
323	11 MED	URINARY STONES AGE >69 AND/OR C.C.	.7057	4.9	26
324	11 MED	URINARY STONES AGE <70 W/O C.C.	.5415	3.9	19
325	11 MED	KIDNEY + URINARY TRACT SIGNS + SYMPTOMS AGE >69 AND/OR C.C.	.7172	5.4	27
326	11 MED	KIDNEY + URINARY TRACT SIGNS + SYMPTOMS AGE 18-69 W/O C.C.	.5814	4.3	21
327	11 MED	* KIDNEY + URINARY TRACT SIGNS + SYMPTOMS AGE 0-17	.4975	3.1	14
328	11 MED	URETHRAL STRICTURE AGE >69 AND/OR C.C.	.6440	4.8	22
329	11 MED	URETHRAL STRICTURE AGE 18-69 W/O C.C.	.5271	3.9	17
330	11 MED	* URETHRAL STRICTURE AGE 0-17	.2788	1.6	5
331	11 MED	OTHER KIDNEY + URINARY TRACT DIAGNOSES AGE >69 AND/OR C.C.	.8826	6.3	28
332	11 MED	OTHER KIDNEY + URINARY TRACT DIAGNOSES AGE 18-69 W/O C.C.	.7682	5.0	27
333	11 MED	* OTHER KIDNEY + URINARY TRACT DIAGNOSES AGE 0-17	.5093	3.2	18
334	12 SURG	MAJOR MALE PELVIC PROCEDURES WITH C.C.	1.5450	12.7	30
335	12 SURG	MAJOR MALE PELVIC PROCEDURES W/O C.C.	1.3449	11.8	29
336	12 SURG	TRANSURETHRAL PROSTATECTOMY AGE >69 AND/OR C.C.	.9974	8.4	22
337	12 SURG	TRANSURETHRAL PROSTATECTOMY AGE <70 W/O C.C.	.8403	7.2	17
338	12 SURG	TESTES PROCEDURES, FOR MALIGNANCY	.8975	6.3	28
339	12 SURG	TESTES PROCEDURES, NON-MALIGNANT AGE >17	.6030	4.5	15
340	12 SURG	* TESTES PROCEDURES, NON-MALIGNANT AGE 0-17	.4335	2.4	7
341	12 SURG	PENIS PROCEDURES	.9879	6.0	23
342	12 SURG	CIRCUMCISION AGE >17	.4184	2.8	10
343	12 SURG	* CIRCUMCISION AGE 0-17	.3788	1.7	4
344	12 SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	1.1088	7.4	29
345	12 SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIG	.8247	5.6	27
346	12 MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, AGE >69 AND/OR C.C.	.9297	6.9	29
347	12 MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, AGE <70 W/O C.C.	.8218	5.7	28
348	12 MED	BENIGN PROSTATIC HYPERTROPHY AGE >69 AND/OR C.C.	.8772	6.2	28
349	12 MED	BENIGN PROSTATIC HYPERTROPHY AGE <70 W/O C.C.	.6925	4.9	22
350	12 MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	.6033	5.2	20
351	12 MED	* STERILIZATION, MALE	.2627	1.3	3
352	12 MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	.6319	4.4	20
353	13 SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY + VULVECTOMY	1.9175	12.4	34
354	13 SURG	NON-RADICAL HYSTERECTOMY AGE >69 AND/OR C.C.	1.0993	9.6	20
355	13 SURG	NON-RADICAL HYSTERECTOMY AGE <70 W/O C.C.	1.0050	8.8	17
356	13 SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	.8372	8.1	18
357	13 SURG	UTERUS + ADENEXA PROCEDURES, FOR MALIGNANCY	1.8989	13.9	36
358	13 SURG	UTERUS + ADENEXA PROC FOR NON-MALIGNANCY	1.0777	8.0	30
359	13 SURG	* TUBAL INTERRUPTION FOR NON-MALIGNANCY	.4235	2.3	7
360	13 SURG	VAGINA, CERVIX + VULVA PROCEDURES	.5923	4.2	19

* MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

*** DRGS #69 AND #70 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
361	13 SURG	LAPAROSCOPY * ENDOSCOPY (FEMALE) EXCEPT TUBAL INTERRUPTION	.4813	2.6	10
362	13 SURG	LAPAROSCOPIC TUBAL INTERRUPTION	.3094	1.4	3
363	13 SURG	D+C CONIZATION * RADIO-IMPLANT, FOR MALIGNANCY	.6448	4.3	18
364	13 SURG	D+C CONIZATION EXCEPT FOR MALIGNANCY	.3986	2.6	9
365	13 SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1.7778	12.7	35
366	13 MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM AGE >69 AND/OR C.C.	.8356	5.2	27
367	13 MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM AGE <70 W/O C.C.	.5726	3.5	24
368	13 MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	.7861	6.7	29
369	13 MED	HEMISTRAL * OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	.6887	5.1	27
370	14 SURG	CESAREAN SECTION WITH C.C.	.9809	7.6	15
371	14 SURG	CESAREAN SECTION W/O C.C.	.7457	6.1	10
372	14 MED	VAGINAL DELIVERY WITH COMPLICATING DIAGNOSES	.5476	3.8	9
373	14 MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	.4021	3.2	9
374	14 SURG	VAGINAL DELIVERY WITH STERILIZATION AND/OR D+C	.5435	3.6	7
375	14 SURG	VAGINAL DELIVERY WITH O.R. PROC EXCEPT STERIL AND/OR D+C	.6817	4.4	15
376	14 SURG	POSTPARTUM DIAGNOSES W/O O.R. PROCEDURE	.4115	2.9	10
377	14 SURG	ECTOPIC PREGNANCY	.4712	2.2	8
378	14 MED	THREATENED ABORTION	.4010	5.5	11
379	14 MED	ABORTION W/O D+C	.3136	2.2	8
380	14 MED	ABORTION WITH D+C	.2677	1.5	4
381	14 MED	FALSE LABOR	.3565	1.4	4
382	14 MED	OTHER ANTEPARTUM DIAGNOSES WITH MEDICAL COMPLICATIONS	.1823	1.2	2
383	14 MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	.4272	3.4	14
384	14 MED	NEONATES, DIED OR TRANSFERRED	.3211	2.2	9
385	15	EXTREME IMPAIRMENT, NEONATE	.6811	1.8	14
386	15	PREMATURITY WITH MAJOR PROBLEMS	3.6480	17.9	40
387	15	PREMATURITY W/O MAJOR PROBLEMS	1.8267	13.3	35
388	15	FULL TERM NEONATE WITH MAJOR PROBLEMS	1.1571	8.6	31
389	15	NEONATES WITH OTHER SIGNIFICANT PROBLEMS	.5425	4.7	16
390	15	NORMAL NEWBORNS	.3486	3.4	9
391	15	SPLENECTOMY AGE >17	.2218	3.1	7
392	16 SURG	OTHER O.R. PROCEDURES OF THE BLOOD * BLOOD FORMING ORGANS	2.7458	16.4	38
393	16 SURG	RED BLOOD CELL DISORDERS AGE >17	1.5206	9.1	31
394	16 SURG	RED BLOOD CELL DISORDERS AGE 0-17	1.1030	6.1	28
395	16 MED	COAGULATION DISORDERS	.7758	6.1	28
396	16 MED	RETICULOENDOTHELIAL * IMMUNITY DISORDERS AGE >69 AND/OR C.C.	.6230	4.1	18
397	16 MED	RETICULOENDOTHELIAL * IMMUNITY DISORDERS AGE <70 W/O C.C.	.9761	6.7	29
398	16 MED	LYMPHOMA OR LEUKEMIA WITH MAJOR O.R. PROCEDURE	.8808	6.1	28
399	16 MED	LYMPHOMA OR LEUKEMIA WITH MINOR O.R. PROCEDURE	.8371	5.6	28
400	17 SURG	LYMPHOMA OR LEUKEMIA WITH MINOR O.R. PROCEDURE	2.7978	14.9	39
401	17 SURG	LYMPHOMA OR LEUKEMIA WITH MAJOR O.R. PROCEDURE	1.2280	8.9	31
402	17 SURG	LYMPHOMA OR LEUKEMIA WITH MINOR O.R. PROCEDURE AGE <70 W/O C.C.	1.1198	7.1	29
403	17 MED	LYMPHOMA OR LEUKEMIA AGE >69 AND/OR C.C.	1.1593	7.1	29
404	17 MED	LYMPHOMA OR LEUKEMIA AGE 18-69 W/O C.C.	1.1665	6.4	28
405	17 MED	LYMPHOMA OR LEUKEMIA AGE 0-17	1.0408	4.9	27

* MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOS VOLUME DRGS.
 ** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.
 *** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

DRG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
406	17 SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPLASM W MAJ O.R.PROC + C.C.	2.2435	15.0	37
407	17 SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O C.C.	2.1144	13.3	35
408	17 SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL WITH MINOR O.R.PROC	1.1271	7.1	29
409	17 MED	* RADIOTHERAPY	.8049	5.7	28
410	17 MED	* CHEMOTHERAPY	.3490	2.6	12
411	17 MED	HISTORY OF MALIGNANCY W/O ENDOSCOPY	.7146	4.7	27
412	17 MED	HISTORY OF MALIGNANCY WITH ENDOSCOPY	.3365	2.0	8
413	17 MED	OTHR MYELOPROLIF DISORD OR POORLY DIFF NEOPL DX AGE>69 +/OR C.C.	1.0861	7.3	29
414	17 MED	OTHR MYELOPROLIF DISORD OR POORLY DIFF NEOPL DX AGE<70 W/O C.C.	1.0251	6.4	28
415	18 SURG	O.M. PROCEDURE FOR INFECTIOUS + PARASITIC DISEASES	2.9715	15.1	37
416	18 MED	SEPTICEMIA AGE >17	1.5343	9.2	31
417	18 MED	* SEPTICEMIA AGE 0-17	.7078	5.2	20
418	18 MED	POSTOPERATIVE + POST-TRAUMATIC INFECTIONS	.9864	8.4	30
419	18 MED	FEVER OF UNKNOWN ORIGIN AGE >69 AND/OR C.C.	.8538	6.9	29
420	18 MED	FEVER OF UNKNOWN ORIGIN AGE 18-69 W/O C.C.	.7939	6.2	26
421	18 MED	VIRAL ILLNESS AGE >17	.5982	5.4	21
422	18 MED	* VIRAL ILLNESS + FEVER OF UNKNOWN ORIGIN AGE 0-17	.4315	3.2	10
423	18 MED	OTHR INFECTIOUS + PARASITIC DISEASES DIAGNOSES	1.1981	8.8	31
424	19 SURG	O.R. PROCEDURES WITH PRINCIPAL DIAGNOSIS OF MENTAL ILLNESS	2.1710	14.2	36
425	19 MED	ACUTE ADJUST REACT + DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION	.6741	5.8	28
426	19 MED	DEPRESSIVE NEUROSES	.9396	9.4	31
427	19 MED	NEUROSES EXCEPT DEPRESSIVE	.7598	6.9	29
428	19 MED	DISORDERS OF PERSONALITY + IMPULSE CONTROL	.9640	8.3	30
429	19 MED	ORGANIC DISTURBANCES + MENTAL RETARDATION	.9424	8.8	31
430	19 MED	PSYCHOSES	1.0820	10.8	33
431	19 MED	* CHILDHOOD MENTAL DISORDERS	2.2285	15.4	37
432	19 MED	* OTHER DIAGNOSES OF MENTAL DISORDERS	1.0416	7.2	29
433	20	** SUBSTANCE USE + SUBST INDUCED ORGANIC MENTAL DISORDERS, LEFT AMA	.4411	2.5	17
434	20	** DRUG DEPENDENCE	1.0296	9.1	31
435	20	** DRUG USE EXCEPT DEPENDENCE	1.0626	8.0	30
436	20	** ALCOHOL DEPENDENCE	.8761	8.1	30
437	20	** ALCOHOL USE EXCEPT DEPENDENCE	.6119	3.5	26
438	20	** ALCOHOL + SUBSTANCE INDUCED ORGANIC MENTAL SYNDROME	.8333	6.9	29
439	21 SURG	* SKIN GRAFTS FOR INJURIES	1.8030	8.9	31
440	21 SURG	* WOUND DEBRIDEMENTS FOR INJURIES	1.4653	7.2	29
441	21 SURG	* HAND PROCEDURES FOR INJURIES	.7105	3.0	16
442	21 SURG	OTHER O.R. PROCEDURES FOR INJURIES AGE >69 AND/OR C.C.	1.8828	9.1	31
443	21 SURG	OTHER O.R. PROCEDURES FOR INJURIES AGE <70 W/O C.C.	1.5053	6.6	29
444	21 MED	MULTIPLE TRAUMA AGE >69 AND/OR C.C.	.8738	6.7	29
445	21 MED	MULTIPLE TRAUMA AGE 18-69 W/O C.C.	.7452	5.2	27
446	21 MED	* MULTIPLE TRAUMA AGE 0-17	.4796	2.4	10
447	21 MED	ALLERGIC REACTIONS AGE >17	.4735	3.7	19
448	21 MED	* ALLERGIC REACTIONS AGE 0-17	.3469	2.9	9
449	21 MED	TOXIC EFFECTS OF DRUGS AGE >69 AND/OR C.C.	.7255	5.6	28
450	21 MED	TOXIC EFFECTS OF DRUGS AGE 18-69 W/O C.C.	.5895	3.9	23

* MCDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

*** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC MEAN LENGTH OF STAY, AND LENGTH OF STAY OUTLIER CUTOFF POINTS USED IN THE PROSPECTIVE PAYMENT SYSTEM

ORG	MDC	TITLE	RELATIVE WEIGHTS	GEOMETRIC MEAN LOS	OUTLIER THRESHOLD
451	21 MED	* TOXIC EFFECTS OF DRUGS AGE 0-17	.2882	2.1	8
452	21 MED	* COMPLICATIONS OF TREATMENT AGE >69 AND/OR C.C.	.8404	5.5	28
453	21 MED	* COMPLICATIONS OF TREATMENT AGE <70 W/O C.C.	.8926	5.1	27
454	21 MED	* OTHER INJURIES, POISONINGS * TOXIC EFF DIAG AGE >69 AND/OR C.C.	.8139	5.3	27
455	21 MED	* OTHER INJURIES, POISONINGS * TOXIC EFF DIAG AGE <70 W/O C.C.	.6121	3.5	22
456	22	** BURNS, TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	2.0685	11.6	34
457	22	** EXTENSIVE BURNS	6.7918	12.6	35
458	22 SURG	** NON-EXTENSIVE BURNS WITH SKIN GRAFTS	2.8275	18.3	40
459	22 SURG	** NON-EXTENSIVE BURNS WITH WOUND DEBRIDEMENT * OTHER O.R. PROC	2.7282	12.7	35
460	22 MED	** NON-EXTENSIVE BURNS W/O O.R. PROCEDURE	1.4077	9.0	31
461	23 SURG	* O.R. PROC WITH DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES	1.6335	8.0	30
462	23 MED	* REHABILITATION	1.8078	13.5	36
463	23 MED	* SIGNS * SYMPTOMS WITH C.C.	.7622	6.3	28
464	23 MED	* SIGNS * SYMPTOMS W/O C.C.	.7256	6.0	28
465	23 MED	** AFTERCARE WITH HISTORY OF MALIGNANCY AS SECONDARY DX	.2049	1.5	4
466	23 MED	** AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DX	.6311	3.7	26
467	23 MED	* OTHER FACTORS INFLUENCING HEALTH STATUS	.9697	6.1	28
468		UNRELATED OR PROCEDURE	2.0818	11.2	33
469		***PDX INVALID AS DISCHARGE DIAGNOSIS	.0000	.0	0
470		***UNGROUPABLE	.0000	.0	0

* MEDPAR DATA HAVE BEEN SUPPLEMENTED BY DATA FROM MARYLAND AND MICHIGAN FOR LOW VOLUME DRGS.

** DRG CATEGORIES COMBINED (IN PAIRS) IN THE CALCULATION OF THE CASE MIX INDEX.

*** DRGS 469 AND 470 CONTAIN CASES WHICH COULD NOT BE ASSIGNED TO VALID DRGS.

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