

*Medicaid Issues —*

**MEDICAID REIMBURSEMENT OF INPATIENT  
HOSPITAL SERVICES**

**KPMG Peat Marwick**  
Government Services Management Consultants  
for  
North Carolina General Assembly  
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## Issue Statement

North Carolina Medicaid expenditures for inpatient hospital services were \$486 million in FY92, representing approximately one-fourth of the total Medicaid budget. Because inpatient hospital care is the largest Medicaid program area, reimbursement for these services is a primary target for payment reform. However, analysis of reimbursement policy modifications should not be limited to options which create a one-time cost reduction in expenditures. Rather, analysis of alternative reimbursement systems should address the following additional concerns:

- Promotion of cost efficiency
- Establishment of appropriate payment at levels related to the costs of efficient and well-managed facilities
- Access to quality care
- Program expenditure growth which is at an acceptable level
- Continued compliance with applicable federal and state guidelines, standards and other requirements

## Background

North Carolina Medicaid expenditures for inpatient hospital services increased over 150 percent between 1987 and 1992. (See Exhibit 1.) However, the number of recipients increased 115 percent over the same time period. Consequently, increases in the cost per recipient have been marginal over the past several years.

Inpatient hospital services are reimbursed prospectively, based on hospital-specific 1981 base year costs. The maximum rate per day a facility may receive is the eightieth percentile of all facilities' per diem costs. Per diem rates include both operating and capital costs. Psychiatric facilities are reimbursed at a rate equal to the statewide median cost per day. Additional payments are made to disproportionate share hospitals, which are facilities that serve a large share of Medicaid or indigent patients.

The North Carolina hospital industry faces significant problems. With the exception of certain hospitals in urban areas, occupancy rates throughout the State are low. Several facilities have occupancy rates below 50 percent. (See Exhibit 2.) Low occupancy rates are a sign of an inefficient market, as hospitals look to revenues from filled beds to cover all fixed costs. However, North Carolina is a predominantly rural state; therefore, some excess capacity may be necessary in order to ensure access throughout the State. The hospital industry faces another problem in that Medicaid is not the only payor attempting to

# EXHIBIT 1

## NORTH CAROLINA MEDICAID PROGRAM 1987-1992 INPATIENT HOSPITAL SERVICES EXPENDITURES

Fiscal Year	Payments	Percent Increase (Decrease)	Recipients	Percent Increase (Decrease)	\$ Per Recipient	Percent Increase (Decrease)
1987	\$189,224,702.21		83,833		\$2,257.16	
1988	\$218,261,880.85	15.35	89,947	7.29	\$2,426.56	7.50
1989	\$286,256,013.22	31.15	115,741	28.68	\$2,473.25	1.92
1990	\$339,230,664.77	18.51	131,809	13.88	\$2,573.65	4.06
1991	\$402,113,809.13	18.54	154,844	17.48	\$2,596.90	0.90
1992	\$485,856,059.93	20.83	181,013	16.90	\$2,684.09	3.36
1987-1992		156.76		115.92		18.91

Source: Division of Medical Assistance

## EXHIBIT 2

### NORTH CAROLINA HOSPITAL OCCUPANCY RATES - FY91

Occupancy Level (%)	Number of Hospitals
90-100	2
80-89	10
70-79	11
60-69	23
50-59	19
40-49	22
30-39	17
20-29	12
Less than 20	9

Source: Division of Medical Assistance

control health care expenditures. More than any other time, other payors are seeking ways to control health care costs.

The Omnibus Reconciliation Act of 1980 gave states greater flexibility in establishing Medicaid reimbursement policies. However, Congress was concerned that adequate payment levels be maintained to ensure access to care. Therefore, the Boren amendment to the Social Security Act was enacted to address the standard against which reimbursement was to be measured. The Boren amendment requires that states develop reimbursement rates which are "reasonable and adequate to meet costs which must be incurred by efficiently and economically operated facilities." Enacted during 1981, this provision intended to allow public payors flexibility to design cost containment incentives within provider reimbursement programs. However, courts have interpreted the legislation to require states to meet certain minimum payment levels. Hospitals have filed Boren amendment lawsuits in 22 states, alleging that Medicaid payment rates are inadequate to meet the costs of economically and efficiently operated facilities.

## Findings

***Finding 1: North Carolina Medicaid expenditures for inpatient hospital services are comparable to other states; however, average length of stay is among the highest in the country.***

North Carolina Medicaid payments for inpatient hospital services were equal to 76 percent of facilities' allowable costs in FY91. However, when disproportionate share payments are included, Medicaid payments covered 94 percent of facilities' costs. The American Hospital Association reports the national average Medicaid hospital reimbursement as 78 percent of costs. It is important to make a distinction between the definition of an economic and efficient facility and "allowable costs." Because a cost is allowed does not necessarily mean it is one which would be incurred by an "economic and efficient facility."

Analysis of states' Medicaid payment data seems to indicate that North Carolina expenditures compare favorably to those of other states. As indicated in Exhibit 3, expenditures per discharge are below the national average and the Region IV average. Similarly, expenditures per recipient are below the national average. (See Exhibit 4.) The average length of stay in North Carolina of 5.6 days, although equal to the national average, places it among the top fifteen states in the country. (See Exhibit 5.)

### EXHIBIT 3

#### AVERAGE MEDICAID EXPENDITURES PER DISCHARGE

	1989	1990	Percent Change
Tennessee	\$1,824.08	\$1,318.64	-27.7
HCFA Region IV	\$2,585.27	\$2,482.70	4.0
Virginia	\$2,812.09	\$2,953.36	5.0
South Carolina	\$2,754.10	\$3,492.67	26.8
North Carolina	\$3,393.19	\$3,580.07	5.5
National Average	\$4,351.77	\$4,268.32	-1.9

Source: Health Care Financing Administration, Report on State Medicaid Expenditures

**EXHIBIT 4****AVERAGE MEDICAID EXPENDITURES PER RECIPIENT FOR  
INPATIENT HOSPITAL SERVICES**

	1989	1990	Percent Change
Georgia	\$2,081	\$4,709	126.3%
Florida	3,145	3,854	22.5
Region IV Average	\$2,262	3,137	38.7
Virginia	2,742	2,975	8.5
North Carolina	2,637	2,754	4.4
West Virginia	2,836	2,751	-3.0
Kentucky	2,279	2,696	18.3
Tennessee	1,775	2,318	30.6
Alabama	1,836	2,297	25.1
South Carolina	1,606	2,070	28.9
Mississippi	1,635	2,008	22.8
National Average	3,272	3,695	12.9

Source: Health Care Financing Administration, Report on State Medicaid Expenditures

## EXHIBIT 5

### AVERAGE LENGTH OF STAY FOR MEDICAID RECIPIENTS

	1989	1990	Percent Change
Tennessee	4.18	3.13	-25.1
HCFA Region IV	5.20	4.57	-12.1
Virginia	5.33	5.23	-1.9
South Carolina	6.18	5.6	-9.4
North Carolina	5.94	5.70	-4.0
National Average	5.84	5.90	1.0

Source: Health Care Financing Administration, Report on State Medicaid Expenditures



***Finding 2: While North Carolina's reimbursement system exerts some cost control, other systems more effectively control costs and encourage appropriate utilization.***

While comparison of State Medicaid payment data indicates that average payments in North Carolina are below national averages, North Carolina should evaluate the ability of alternative methodologies to encourage facilities to operate efficiently and control expenditure growth. One reason for the relative effectiveness of the current system is the fact that, for over ten years, rates have been updated by inflation factors, and not by actual changes in facility costs. However, based on Peat Marwick's findings in other states, it is possible that payments are not being made equitably, as rates do not reflect changes in hospitals' costs which may have occurred over the past ten years. Hospitals continue to be reimbursed based on cost patterns in place in 1981.

North Carolina pays for inpatient hospital services on a facility-specific, per diem basis. Although the system is easily understood by providers and requires little maintenance by State staff, there are shortcomings associated with systems which pay hospitals a flat fee for each day of care provided. Because hospitals receive payment for each day of care provided, there is no incentive to control length of stay. Additionally, the payment amount does not address the type or intensity of care provided to patients; facilities receive the same rate per day whether patient care needs are minimal or intensive.

In recent years, several states have moved away from this type of system, toward systems which link payment rates to the resources used to provide particular types of care. Exhibit 6 indicates that 21 states have developed methodologies which establish rates according to diagnosis-related groups (DRGs). Under a DRG-based system, each case is assigned to a DRG by DRG Grouper software, which categorizes inpatient hospital claims into groups which reflect similar resource consumption. The assigned DRG is then multiplied by a base rate in order to determine the payment rate. Because DRG-based systems establish payment rates which reflect resources necessary to provide care, payments are distributed more equitably.

Base rates are often established through the use of peer groups. Peer grouping places facilities into categories based on characteristics which are demonstrated to affect costs. For example, facility location (urban versus rural) is often a criteria used to establish peer groups. By establishing separate base rates for each peer group, the system is able to more effectively control costs.

Some states, however, have opted to establish facility-specific base rates. Although the majority of states use peer grouped base rates, the use of facility-specific base rates avoids the need to make additional adjustments such as separate payment for indirect teaching costs. The decision of how many base rates should be calculated is both a policy decision

## EXHIBIT 6

### STATE DEVELOPMENTS IN HOSPITAL REIMBURSEMENT STATE MEDICAID REIMBURSEMENT METHODOLOGIES (1985-1991)

Reimbursement System	1985 No. of States	1991 No. of States
Cost-based	15	9
Prospective		
Facility-specific	15	10
Peer-grouped	7	6
DRG-based	9	21
Global/Negotiated	4	5

Source: Prospective Payment Assessment Commission, 1991 Report

and an analytical decision. It is a policy decision because the number of base rates that are developed will drive:

- The cost containment incentives within the system
- The potential equity of the system
- The number of adjustments that may need to be built into the system

Another available alternative is the establishment of a statewide base rate. Multiple base rates, such as peer grouped and hospital-specific rates, should only be developed if cost per discharge is statistically different across facilities or proposed peer groups. For example, recent studies have determined that for some state Medicaid programs, urban/rural, teaching status and status as a sole community provider have proven valid predictors of cost differences per discharge among facilities. Once these distinguishing characteristics have been identified, statistically tested and refined, various payment scenarios can be modeled and compared.

***Finding 3: North Carolina's reimbursement system has controlled payments for capital-related costs and medical education costs.***

A hospital's capital-related costs include depreciation expense for buildings and fixtures, moveable equipment such as high technology medical equipment, interest expense associated with loans to acquire depreciable assets, insurance on depreciable assets, the cost of improvements to buildings and fixtures, debt financing or refinancing where depreciable assets are used as collateral, and lease expenses where property is, in effect, purchased. Typically, a hospital's capital related costs account for approximately 7 to 9 percent of a hospital's total budget (operating and capital budgets).

Capital costs, by nature, differ from operating costs. This nature causes difficulties in incorporating these costs into a prospective payment system. Capital expenditures are generally obligated over long periods of time and may reflect decisions made several years earlier under different sets of circumstances. Moreover, capital investment patterns vary significantly among hospitals, reflecting an institution's past resources and access to capital markets.

North Carolina Medicaid reimburses facilities for capital costs on a facility-specific, prospective basis. Payment amounts are based on facilities' 1981 capital costs. Facilities which have incurred substantial changes in their capital cost structure may appeal for modification of their base rate. Because capital rates have not been rebased since 1981, North Carolina generally controlled Medicaid expenditures for capital-related costs. However, a shortcoming of the system may be that it rewards some facilities for inefficient performance. Facilities with inefficient levels of capital costs in 1981 continue to be reimbursed for these inefficiencies. Conversely, facilities with low capital costs in 1981 are, in effect, penalized for their previous efficiency.

The North Carolina Medicaid program reimburses hospitals for medical and nursing education according to each facility's base year operating costs for these services. This methodology is highly effective in its ability to control costs.

Exhibit 7 presents a comparison of North Carolina's Medicaid inpatient hospital reimbursement policies to those of other states in the southeastern region, including comparisons of methodologies for the payment of capital and medical education costs.

***Finding 4: North Carolina does not negotiate with providers to obtain better rates in areas of the State where competition among hospitals exists.***

Selective contracting is an innovative form of reimbursement which is designed to encourage provision of care in efficient and cost-effective facilities. Selective contracting is a method of establishing payment rates through the use of a competitive bidding process. In this approach, the hospitals serve as contractors to the Medicaid program for the provision of services. This process may be used to set reimbursement rates regardless of the underlying form of payment (per diem, DRG or hybrid system), and it may be used to determine all-inclusive inpatient and/or outpatient rates, or it may be applied to select services only, such as neonatal intensive care units services.

Under a selective contracting system, the State acts as a prudent buyer of services, and generally selects only those facilities which offer the most cost-effective arrangements for services. The State must also ensure that quality of care is maintained, and that Medicaid recipients have appropriate access to care. Because Medicaid recipients' freedom of choice is restricted, a Freedom of Choice waiver must be obtained from the federal Health Care Financing Administration.

Within the competitive bid approach, two major variations have been implemented in other states. The most common approach is to select designated providers based on a selective contracting approach. All hospitals within a geographic area are encouraged to submit a bid; generally, the lowest bids are accepted to the point at which the number of providers selected ensures access to care for all recipients in a given geographic area. All other hospitals in the area are excluded from receiving Medicaid reimbursement for specified, non-emergency types of care. In some cases, it is not the lowest bid that is selected. Based on quality of care concerns selection could be made based on using Medicare's and private insurers policies which favor the hospitals that perform a high volume of a specific service.

The second approach, which was used in the Illinois Medicaid program, involves contracting with most hospitals in a contracting region, but limits the number of service units (in Illinois, this is days of care) for which the more expensive providers are reimbursed. The primary objective of this approach is to force the more routine cases requiring less complicated care out of the expensive, tertiary care hospitals, into less

# EXHIBIT 7

## COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Alabama	Florida	Georgia	Kentucky
Payment Methodology	Prospective; state-operated; cost-based	Non-rural: prospective; rural: cost-based	Prospective	Prospective	Prospective
Payment Unit	Per diem	Per diem	Per diem	Per case	Per diem
Standard for Rate Determination	Hospital-specific with cost ceilings at eightieth percentile of all facilities' arrayed costs; psychiatric reimbursed statewide median cost	Non-rural: peer-grouped ceilings at eightieth percentile	Hospital-specific county revenue ceilings; exempted facilities include teaching, children's, rural and psychiatric hospitals	Hospital-specific	Hospital-specific; 120 percent of peer-grouped median costs establish ceilings
Classification and Relative Weights	N/A	N/A	N/A	N/A	N/A

**EXHIBIT 7 (Continued)**

**COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES**

	<b>North Carolina</b>	<b>Alabama</b>	<b>Florida</b>	<b>Georgia</b>	<b>Kentucky</b>
<b>Base Year</b>	1981, unless rebased through appeals process	Previous year	Previous year	Governor and general assembly decide whether to rebase; rebasing has occurred annually in recent years	Most recent cost report
<b>Update/ Inflation Factor</b>	Inflation and HCFA update	DRI National and Southern Marketbasket Index	Southern Marketbasket Index	DRI National Marketbasket	DRI National Marketbasket
<b>Capital Cost Reimbursement</b>	Prospective; included in base year rate	Non-rural: passed through with occupancy adjustment	Included in per diem rates		Capital and related costs subject to 75 percent minimum occupancy factor
<b>Medical Education Cost Reimbursement</b>	Prospective; included in base year rate	Direct costs passed through	Included in per diem rates		Teaching/Non-teaching peer groups
<b>Service Limits</b>	None	Fourteen days/year	Forty-five days per year	None	Fourteen days/year