

# The Medicaid Program in Puerto Rico: Description, Context, and Trends

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*The Medicaid program in Puerto Rico differs from United States Medicaid programs in several important ways. First, it operates within a larger, centrally administered health care delivery system. Approximately half of Puerto Rico's 3.2 million inhabitants are poor and depend upon the public health system for their medical care. Second, recipients are not free to choose their own provider, but are referred to the proper level of care by public health care system professionals. Third, this system has a low average recipient cost. Fourth, Congress has "capped" the Federal financial participation since 1968. Finally, despite the economic constraints and large Medicaid population, health status in Puerto Rico compares favorably with that in the United States.*

*This study describes the organization and operation of Puerto Rico's Medicaid program in terms of basic expenditures and utilization data. The Puerto Rican program is an important example of an alternative health care delivery system for the poor. It is interesting in the contrast it provides to United States Medicaid programs and as a case study of how such a program operates when Federal financing is "capped" over a period of time.*

## Introduction

The Puerto Rican Medicaid program is a unique health care program that provides services for approximately half of Puerto Rico's 3.2 million population. The Commonwealth of Puerto Rico is the chief provider of health services for the indigent population, principally through the Medicaid program. The program operates within a publicly-owned and centrally administered health care delivery system which has operated under a Federal financial "cap" since 1968. Medicaid services are provided exclusively through public facilities.

This report describes the Puerto Rican Medicaid program in the context of the broader health care delivery system and the Federal cap on Medicaid expenditures in Puerto Rico imposed in 1968. The first section briefly describes the historical background of

Puerto Rico. This is followed by a description of the data used in the report and the process by which the data were collected. The report then provides an extensive overview of the Puerto Rican health care delivery system, indicating the degree to which the Puerto Rican health care system differs from that of the Mainland United States. The concluding section discusses linkages between delivery system characteristics and health care use and expenditures.

## Background

The United States acquired Puerto Rico in 1898 when Spain ceded it to the United States under the Treaty of Paris following the Spanish-American War. In 1917, Puerto Ricans became United States citizens through the enactment of the Jones Act. The people of Puerto Rico and the United States Congress subsequently ratified a constitution and Puerto Rico became a Commonwealth in 1952.

Puerto Rico's population was approximately 3.2 million in 1980. Roughly 2.1 million people were too poor to adequately obtain health care from the private

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health care system (Toby, 1980). In 1979, approximately 1.3 million were eligible for and enrolled in the Medicaid program.

Life expectancies for Puerto Rico and the United States were 73.5 and 72.8 years, respectively, in 1979. For women, the comparable rates were 77.1 years in Puerto Rico and 77.3 years in the United States; for men they were 70.2 years and 69.7 years, respectively (Department of Health, 1950-1980). The mortality rate in Puerto Rico has remained approximately the same for the last 20 years. The crude death rate in Puerto Rico was 6.5 per 1,000 population in 1979 (see Table 1). Despite the high level of poverty in Puerto Rico, this rate compares favorably with that of the United States (9.0 per 1,000) (Department of Health, 1950-1980).

In comparison with the United States, Puerto Rico has a relatively young population. Thus, one reason for its lower mortality rate is the smaller proportion of people in high risk, older population groups. Over 50 percent of Puerto Rico's population is under 25 years of age compared to 42 percent in the United States. In 1979, persons between 0 and 15 years accounted for 28.4 percent (Puerto Rico Planning Board, 1980-1985). In 1979, the elderly, or persons 65 years of age and over, represented 7 percent of the population compared to 11.2 percent in the United States. Adjusting for these differences in age structure between the two countries raised the death rate for Puerto Rico from 6.5 to 8.2 percent.<sup>1</sup> Thus, even though Puer-

to Rico's population is younger and at lower risk than that of the United States, these differences do not explain the lower mortality rate. Between 1975 and 1980, infant mortality in Puerto Rico decreased at an average of 2.3 percent per year from 20.6 per thousand live births in 1975 to 18.5 in 1980. In the United States, infant mortality rates were 16.1 in 1975 and 12.5 in 1980 with a decrease of 4.5 percent per year, or almost two times greater than the decrease experienced in Puerto Rico for the same period. These data suggest that although infant mortality has decreased significantly in Puerto Rico, the current rate is still 48 percent above that of the United States.

Much more important is the problem of financing medical services in the face of growing public assistance needs, medical care cost inflation, and a fixed Federal "cap" on Medicaid matching payments. The combination of high unemployment and increasing poverty has generated extensive public assistance needs in Puerto Rico. Approximately, 13 percent of Puerto Rico's population receives cash assistance. Federal and local funds go into the Puerto Rican Cash Assistance Program. The official unemployment rate in Puerto Rico was 19.0 percent in 1980 compared to 7.3 percent for the United States.

Poverty is also a perennial problem in Puerto Rico. A recent survey found that approximately 11.0 percent of all Puerto Rican families have little or no income (Department of Health, 1975). In 1975, Puerto Rico's average annual *per capita* income was \$2,230 while that of Mississippi, the State with the lowest *per capita* average, was \$4,052. For the same year, the mean family income was \$7,313 and it is estimated to have been \$8,910 for 1980. In 1975, the median family income in the United States was \$13,719 compared to \$6,103 in Puerto Rico (U.S. Department of Commerce,

<sup>1</sup>Mortality rates were adjusted using the "direct method" (Spiegelman). Seven age groups were used in this adjustment procedure: 0-4, 5-24, 25-34, 35-44, 45-54, 55-64, and 65 and over.

**TABLE 1**  
**Population, Births, Birth Rates, Mortality and Infant Mortality**  
**Puerto Rico: Years 1960-1980**

Years	Population	Births <sup>1</sup>	Birth Rates <sup>2</sup>	Deaths	Mortality Rates	Infants' Mortality	Infants' Mortality Rates <sup>3</sup>
1960	2,359,822	79,056	33.5	15,841	6.7	3,325	42.1
1970	2,721,700	70,136	25.8	18,080	6.6	1,930	27.5
1971	2,778,100	73,962	26.8	18,144	6.5	1,957	26.5
1972	2,862,600	71,671	25.0	19,011	6.6	1,866	26.0
1973	2,869,300	71,574	24.9	19,257	6.7	1,667	23.3
1974	2,886,700	72,885	25.2	19,490	6.8	1,609	22.1
1975	2,934,600	72,479	24.7	19,073	6.5	1,455	20.6
1976	3,012,700	75,798	25.2	19,893	6.6	1,472	19.4
1977	3,067,400	78,157	25.5	19,895	6.5	1,507	19.3
1978	3,114,000	78,069	25.1	19,876	6.4	1,390	17.8
1979	3,152,400	76,732	24.3	20,406	6.5	1,479	19.3
1980	3,200,000	73,060	22.8	20,486	6.4	1,349	18.5

Source: Planning Board, Area of Economic and Social Planning, Human Resources Division, January 1981.

<sup>1</sup>Adjusted births by 4 percent for sub-register.

<sup>2</sup>Rates for every 1,000 inhabitants.

<sup>3</sup>Rates for every 1,000 born alive.

1978, 1979). Income levels vary widely across Puerto Rico's geographic regions (see Table 2 and Figure 1). In spite of these low income levels, Puerto Rico has the lowest poverty rate of any Caribbean Island, and one of the lowest in Central and South America.

**TABLE 2**  
**Family Income by Health Region:**  
**1975 and 1980**

Region <sup>1</sup>	1975	1980	Change from 1975 to 1980
Metropolitan	\$7,772	\$9,389	\$1,617
East	5,756	6,908	1,152
Northeast	5,517	6,637	1,120
South	5,282	6,352	1,070
West	5,156	6,178	1,022
North	5,011	5,937	926

Source: Puerto Rico Planning Board, "Situación de la Vivienda en Puerto Rico," 1980.

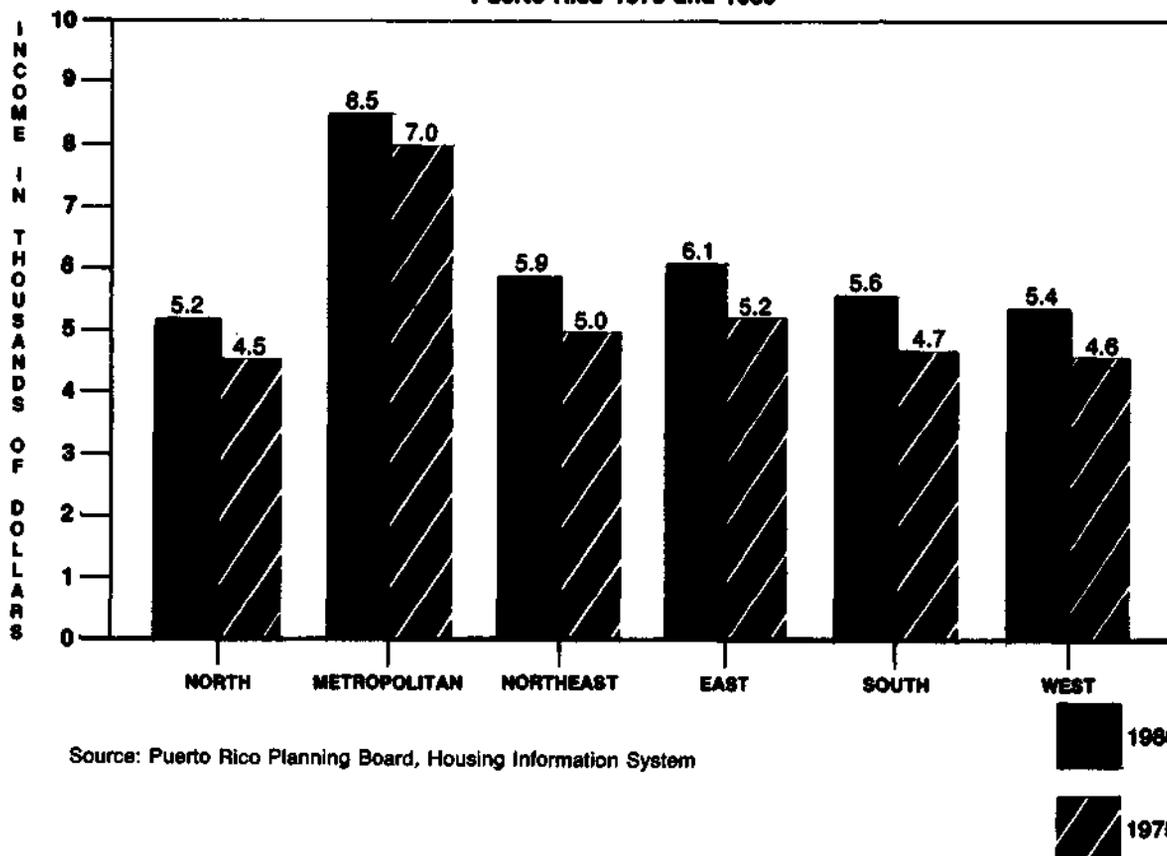
<sup>1</sup>Puerto Rico is divided into 6 major regions for purposes of administering the Medicaid program efficiently.

The financing problem is further complicated by the 7.5 percent annual increase in medical care cost which surpassed the 4.5 percent cost of living increase. The absolute and relative number of families unable to meet their medical needs has increased in Puerto Rico over the past several years. In addition, the Puerto Rican health care system must remain operationally viable with the fixed Federal "cap" on Medicaid during an inflationary period. Therefore, the present public health system must attempt to meet the increase in medical needs with a fixed amount of available resources.

### Data Collection and Methodology

The data for this report were compiled from numerous, widely scattered sources, including Federal reports and local Medical Assistance program reports. Compiling these data presented a major challenge since many important Federal surveys exclude Puerto Rico from their samples. In addition, the tight economic situation and unique health care system of Puerto Rico have hampered development of a health

**FIGURE 1**  
**Average Family Income by Health Region**  
**Puerto Rico 1975 and 1980**



care information system. Data obtained from Federal agencies were often ambiguous and contradictory in nature. To resolve these data problems the Puerto Rican Medicaid authorities were contacted directly.

The public health care information system that does exist in Puerto Rico is based on payment claims filed by service providers in the Department of Health. For each patient treated, the Departmental provider must complete an ambulatory service form (Form 10) or a Hospital Admissions and Discharge form (Form 11) before any service is provided. These forms are subsequently included in the Department of Health's (DOH) Integrated Information System (IIS). The claim is reviewed by a unit located within the facility to assure proper documentation and to assure that the service is covered by the Medicaid program. Any errors or questionable claims are returned to the facility's billing office for clarification. Bills without errors are sent to the appropriate Regional Office for further review and validation and from there to the Medicaid Central Office. Manual screening at the facility, regional, and central levels serves to identify any duplicate claims.

Under an agreement with the Health Care Financing Administration's (HCFA) Regional Office, the dollar value of the claims required to justify the \$30 million in Federal Financing Participation (FFP) are estimated manually by processing a 1 percent sample of outpatient claims (U.S.D.H.H.S., 1979, 1980). Data obtained from the analysis of the 1 percent sample are projected to the universe of outpatient claims and are added to total facility costs to arrive at the amount of FFP to be claimed. This 1 percent sample was originally intended to be an interim system that was to be slowly increased to 100 percent when the construction of the Medicaid Management Information System (MMIS) was completed.<sup>2</sup> Economic constraints have prevented completion of this system. At the end of each quarter these figures are added to the costs of inpatient services (100 percent of which are included in the manual claims process) to determine the total FFP claimed.

In 1979, a Billing and Collection Division (BCD) was created within DOH for the implementation and administration of a Third Party Liability (TPL) system. Its purpose is to develop additional economic resources for the expansion of medical services to the indigent population and to comply with Federal regulations that mandate such units.<sup>3</sup> BCD has staff in each of the public Medicaid facilities.

The Medicaid program collects TPL information from applicants at the time they are certified or recertified as being eligible. BCD goes beyond this and

<sup>2</sup>Program staff manually produce the required HCFA reports such as the HCFA-120 and HCFA-2082 concerning service costs, type of services utilized, length of inpatient stays, and other necessary reports. These reports are also used by central office staff to identify regions in need of additional resources.

<sup>3</sup>Section 1902(a)(25) and 1903(d)(2) of the Social Security Act and 42 CFR 433.135.

has the responsibility of identifying any other TPL source not divulged by the applicant. The 1979 State assessment reported that 92 percent of the cases reviewed had correct TPL information.

The Title XIX agency has an active Quality Control (QC) corrective action program. Every region chooses 175 cases for a sampling. Out of these, 30 are reviewed during each month in order to establish the Commonwealth's QC program. There are 16 reviewers for all regions.

According to quality control reports filed with HCFA, Puerto Rico is accurately determining eligibility for the "categorically needy" in 99 percent of all cases (U.S.D.H.H.S., 1979, 1980). This is not true for those people determined to be "medically needy." Only 69 percent of the medically needy cases had been correctly determined to be eligible. This high error rate is attributable to a variety of problems including (1) the lack of an automated eligibility file, (2) lack of sufficient well trained eligibility staff at the central office level to clarify eligibility policy and (3) insufficient staffing of the certification units in many areas. In addition, the Medicaid program is currently unable to obtain claims processing QC data for use in corrective action planning. Since only 1 percent of outpatient claims are processed through the payment stage, very few of the QC sample cases can be tracked through a "paid" claim basis.

The Medicaid program in Puerto Rico reimburses the Department of Health on a *per diem* or per visit basis, rather than on a fee-for-service basis. That is, there is an all-inclusive *per diem* for inpatient care and an all-inclusive visit charge for outpatient care. For example, Medicaid would be charged the same price for an X-ray of a finger as it would for an X-ray taken to detect a leg fracture. Puerto Rico does not breakdown the *per diem* and visit charges into line item service categories in its reporting system. Due to the unique nature of this claims processing system, billing form categories are different from those in United States Medicaid information systems. This handicaps Puerto Rico's ability to report detailed services in a manner comparable to U.S. systems.

The Puerto Rican Medicaid program does not pay physicians or other health care professionals on a fee-for-service basis. Rather, salaries in the public health facilities are based primarily on the size of the population they serve and the type of facility in which they serve.

## The Puerto Rican Health Care System

The Puerto Rican Medicaid program can best be understood in the context of its overall health care delivery system. The cap and economic realities produced by widespread poverty have combined to produce a Medicaid program that differs from the U.S. programs in a number of significant ways. For example, (1) recipients have no freedom of choice in selecting providers, they must use the public health

care system; (2) the public health care system (including Medicaid) does not provide long-term care services; (3) Medicaid is operated through a completely vertically-integrated health care system, that is, decisions for the program are made at the top level of government and flow directly down to the operation of the program. However, some delegation of authority to lower levels does occur.

Furthermore, the Puerto Rican health care system has a distribution and supply of the health care professionals and facilities unlike that of any State in the U.S.

### Supply and Distribution of Health Care Professionals

Data for 1979 show that there was a total of 30,462 practicing health professionals in Puerto Rico, of these 5,368 were physicians (Department of Health, 1981). The majority of physicians practice in the private sector, while the majority of all health care professionals are employed in the public sector. Specifically, Puerto Rico's Department of Health employs over 17,500 health care professionals, or 57.3 percent of all professionals in its public facilities which provide Medicaid and other public health care services (Puerto Rico Planning Board, 1979).

In 1978, the ratio of physicians to total population was 1.3 per 1,000 persons. A comparable ratio in the U.S. is 1 per 574 persons (U.S. D.H.E.W., 1978). Although, the physicians population ratio in Puerto Rico is lower than in the United States as a whole, there are many areas of the United States where there are fewer physicians *per capita* than in Puerto Rico. There is 1 dentist per 5,000 inhabitants in Puerto Rico as compared to 1 per 1,585 in the U.S. The Federal standard defining a "manpower shortage area" is 1 dentist per 4,000 inhabitants, which is the prevailing ratio in Puerto Rico.

There were approximately 5,000 graduate nurses and 5,400 practical nurses in Puerto Rico. However, a 1975 study found that 68 percent of all nurses were located in the San Juan, Ponce, and Mayaguez regions which comprise only 45 percent of the population (Puerto Rico Planning Board, 1980-1985). As in the United States, low salaries and poor working conditions are believed to have caused many nurses to withdraw from the health care labor market, especially in the nonmetropolitan areas.

This again points to the observation that while there are sufficient numbers of medical professionals in the aggregate, they are not well distributed across Puerto Rico in relation to the population distribution. In particular, according to the Preliminary State Health Plan 1980-85, rural areas and small towns, especially in the interior mountain zone of Puerto Rico, are inadequately supplied with health care professionals. The Commonwealth has tried to deal with the distribution problem through economic incentives and legislation requiring compulsory public service

prior to licensing. According to Puerto Rico's Public Law #79, prior to being eligible to receive a license, a medical professional must serve one year with the Puerto Rican government in a "manpower shortage area." Without this law, a much more serious shortage would exist in such nonmetropolitan areas.

Finally, the overall distribution of health care professionals and the availability of these professionals in Puerto Rico is directly affected by the salary differences between the public sector and private sector and the U.S. salaries. For example, salaries for public sector physicians range from approximately \$15,000 to \$30,000 per year compared to an estimated private sector income average of \$45,000 to \$50,000 in Puerto Rico. These salaries are lower than those in the United States.

### The Supply of Health Care Facilities

The Registry of Hospitals and other health facilities for 1980-1982 showed the following facilities in Puerto Rico.

- 89 Hospitals
- 12 Nursing Homes
- 11 Community Health Centers
- 2 Medical Facilities for Mentally Retarded
- 74 Diagnostic and Treatment Centers
- 9 Public Health Units
- 2 Extended Care Facilities
- 2 Psychosocial Rehabilitation Centers

The Joint Commission on Hospital Accreditation (JCHA) evaluates hospitals on a voluntary basis. In 1978-1979, 26 hospitals (29.2 percent) were accredited by the JCHA. Of these, five were public and 18 were private. The five public hospitals accredited were the larger regional hospitals.

Table 3 shows the number of general hospital beds and general hospitals from 1970 through 1980.

TABLE 3

Number of Certified Beds in General Hospitals  
Fiscal Years 1970-1980

	Number of General Hospitals	Number of Beds in General Hospitals
1970-71	124	8,771
1971-72	124	8,637
1972-73	124	9,459
1973-74	122	9,537
1974-75	122	9,389
1975-76	121	9,379
1976-77	121	9,554
1977-78	130	12,581
1978-79	85	10,737
1979-80	89	10,667

Source: Department of Health Annual Hospital Statistical Report (1970-71 to 1979-80)

The number of general hospitals has decreased since 1970, from 124 facilities in 1970 to 89 facilities in 1980. However, the number of certified general hospital beds increased from 8,771 in 1970 to 10,667 in 1980. Puerto Rico had chosen to develop slightly larger hospitals by eliminating smaller hospitals and increasing the number of certified beds in existing hospitals.

### Private Sector

Approximately one-half of the population receives medical care from private sector providers. Most private facilities and private physicians are concentrated in the Metropolitan areas (San Juan, Ponce and Mayaguez).

In 1978, the private sector accounted for \$543 million in personal medical expenditures, which amounted to 8.8 percent of the total gross internal (domestic) product of Puerto Rico. By comparison, private expenditures for medical care in the United States represented 5.0 percent of the gross national product. These expenditures for private medical care were greater in Puerto Rico than for any other personal expenditure category (for example, food, transportation, articles for the home, housing and recreation).

As has been the case in the U.S., Puerto Rican medical prices and total health care expenditures have been rising rapidly over the years. During the period 1970-1976, private health expenditures in Puerto Rico increased at an average annual rate of almost 8 percent. The price of medical care services increased at the same rate.

The Department of Health has certain licensing and regulatory powers with regard to the private health sector. These powers are in the area of certification and enforcement of health standards. Private health sector planning and development activities are unregulated.

### Public Sector: Organization and Operation

The government-owned and operated public health care system is organized into six Regional Offices and a Central Office.<sup>4</sup> Each of the six major regions has administrative autonomy and depends on its own resources for the provision of care.

The Central level has a number of functions. Its primary function is the formulation and determination of policy. The Central level also (1) provides supra-regional services such as laboratories, blood banks, etc., (2) develops procedures for the provision of services, and (3) allocates funds among the regions. The Central level also sets policies and guidelines which the Regional Directors implement.

<sup>4</sup>Two of Puerto Rico's eight regions (Aguadilla and Fajardo) are significantly smaller in population, and for health system purposes are classified as sub-regions.

The Regional level offices provide operational direction in the actual delivery of health care. For example, the Regional Directors have control over personnel management, budgeting, and planning within their jurisdictions. The role of the Central level is limited to drafting guidelines and providing technical assistance to the regions.

The Office of Health Economics (Oficina de Economía de la Salud) of DOH assumes the lead responsibility for meeting Title XIX requirements. The office has a Medical Assistance Program (MAP) division which oversees Medicaid. This division sets guidelines for the regions and primary level installations (for example, health centers) in order to comply with Medicaid program requirements. The division has five sections:

1. Field Operation Monitoring
2. Eligibility Determination and Standard Setting
3. Statistical
4. Financial Management
5. Early Periodic Screening, Diagnosis and Treatment (EPSDT)

MAP is assisted on the regional level by the Executive Directors and staffs of the regional Medicaid units. These regional units monitor program implementation at the local level. These same regional staffs also act as liaisons with health care facilities and practitioners on behalf of the Medicaid program.

Each of the foregoing levels of health organization provides services classified as either primary, secondary, or tertiary levels of care according to the specialized health need that is to be rendered. Services provided at the different levels may not be mutually exclusive because where one level ends and the other begins is somewhat arbitrary and varies across the regions. In particular, higher levels may provide all the services provided at lower levels.

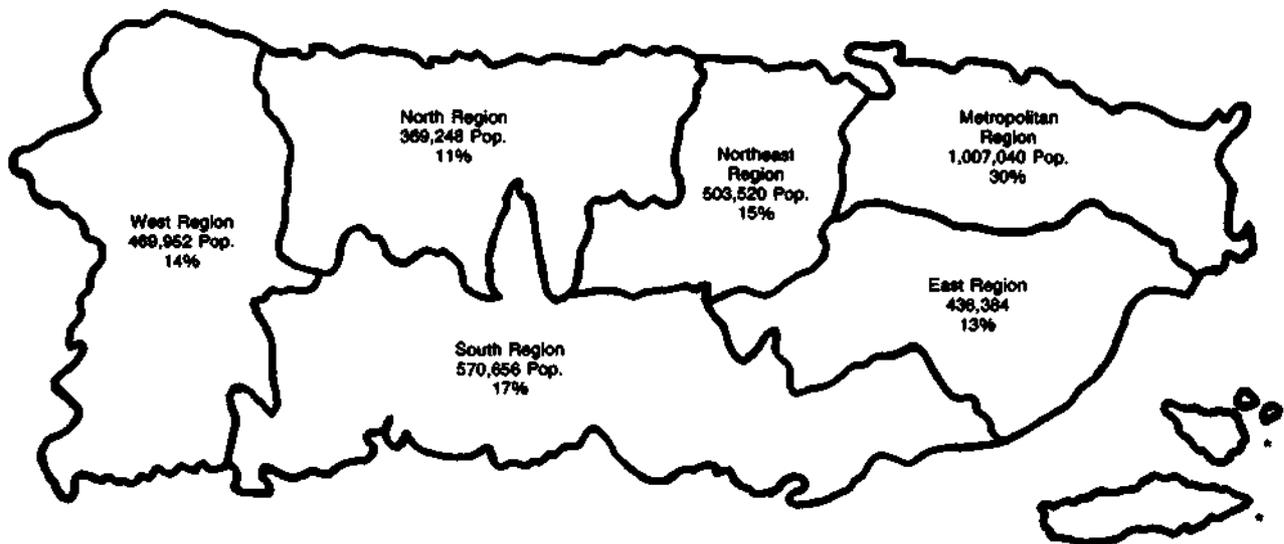
The type of service to be provided at a particular level varies as a function of the resources available. Services offered primarily at the tertiary level may be made available at the secondary level if resources are sufficient.

From a practical standpoint, the system works roughly as follows. Patients are referred from the local level (municipal) to an intermediate level (area hospital) or to Regional Hospitals (Caguas, Arecibo, Bayamon). From there, if the medical condition so requires, they are transferred to one of the three medical centers located in the Northeast (Rio Piedras), South (Ponce), and West (Mayaguez) regions of Puerto Rico. The municipalities selected as area centers were chosen according to the health resources available. Each of the area hospitals serves a population of approximately 500,000 people and three to five municipalities.<sup>5</sup>

Primary services in Puerto Rico are defined as those provided in the health care centers. Each mu-

<sup>5</sup>See Figure 2, Population Estimates and Percentage Distribution by Health Region, Puerto Rico, 1978.

**FIGURE 2**  
**Population Estimates and Percentage Distribution by Health Region**  
**Puerto Rico, 1978**



\* Belong to Metropolitan Region

Source: Puerto Rico Planning Board, *Economic Report to the Governor, Puerto Rico, 1978*

nicipality has a health care center. These health centers are the entry points to the public health care system. They provide primary ambulatory services, including X-ray and drug services. Within each center, care is delivered by family health teams composed of general practitioners, some specialists (depending on availability), and specially trained allied health personnel. The health care centers do not provide inpatient services except in cases where the centers serve isolated communities or have a large population (50,000 inhabitants or more). Such rural health centers contain a small hospital unit with fewer than 25 beds for emergency purposes. In addition to their role as primary health care providers, each center's staff is also responsible for seeing that the standards and regulations which govern service delivery, (in both the public and private sectors) are observed in their locality.

Secondary and tertiary care include outpatient and inpatient services in four specialties: (1) internal medicine, (2) pediatrics, (3) obstetrics-gynecology, and (4) surgery. The three regional medical centers located in Ponce, Mayaguez, and Rio Piedras offer highly specialized services. For example, the single psychiatric hospital in Puerto Rico is located in the municipality of Rio Piedras.

Under United States Public Law 94-48, Puerto Rico was exempted from the requirement of recipient free-

dom of choice of providers. All health care under Medicaid is provided through the public health delivery system which Medicaid recipients are required to use. There is no payment to private sector providers.

### Financing

The Puerto Rico Medicaid program is financed through local and Federal funds. It has operated with a fixed Federal Financial Participation (FFP), since 1968. Congress fixed the amount at \$20 million in 1968, and increased this amount to \$30 million in 1972. The Omnibus Budget Reconciliation Act of 1981 increased the cap to \$45 million per year. However, Puerto Rico finds it necessary to over-match the Federal share for Medicaid in order to maintain an adequate level of care for Medicaid recipients (See Table 4). By FY 1979 the \$30 million represented only 17.3 percent of the total public health care system expenditures. The gap between the total expenditures and the reported figures is largely due to payments for "Commonwealth-only" recipients that are funded with Commonwealth-only funds.<sup>9</sup>

<sup>9</sup>Integral Medicine Program (Law 56 of 1969) guarantees health care to indigent individuals who are not categorically eligible and who lack health insurance.

**TABLE 4**

**The Public Health Care System of Puerto Rico  
Fiscal Years 1975 Through 1980  
(in thousands)**

Fiscal Year	Total Public Health Care System Budget	Reported for Medicaid FFP Claiming Purposes
1975	\$129,200	\$113,088
1976	137,800	93,945
1977	145,200	94,789
1978	149,500	97,487
1979	173,521	82,966
1980	201,272	99,556

**Eligibility**

Public health care services are available to all persons in Puerto Rico too poor to afford adequate medical care. Medicaid recipients are classified into two groups depending on their income level: (1) the categorically needy, and (2) medically needy. A third group covered only by Commonwealth funds, comprises all those not eligible under Medicaid, but poor and in need of care.

HCFA's procedures call for redetermination of Medicaid eligibility once a year. However, these procedures are based upon an operational Medicaid Management Information System which would automatically signal cases in need of redetermination. The Puerto Rican MMIS is not yet operational and the large case load makes manual identification of all cases impossible. Hence, Puerto Rican recipients currently are recalled for redeterminations only when they produce an expired Medicaid card while obtaining services. If a recipient produces an expired card at a facility, services are provided but the claim is held awaiting verification of eligibility. The patient is asked to report to the Certification Unit to reapply for Medicaid if he or she presents an expired card.

**Services Provided**

A distinguishing characteristic of the Medicaid program in Puerto Rico is that its benefits are available exclusively through the Public Health System. Covered services must be rendered by physicians and dentists employed either by the Commonwealth or a municipality.

These public facilities provide the full range of ancillary services including laboratory and X-ray services, prescription drugs, psychiatric and psychological services, occupational and physical therapy services, and clinical services. All inpatient services normally provided by public hospitals and extended care facilities are also covered. The single exception

is elective cosmetic surgery which is not covered. Certain services to Medicaid eligibles are provided under Title V of the Social Security Act or through other Puerto Rican agencies by administrative decisions of the Commonwealth. For example, Medicaid has negotiated with the Public Health Services (PHS) for PHS provision of family planning services to Medicaid eligibles under Title V (U.S.D.H.H.S., 1979, 1980).

Transportation or ambulance service to clinics, health centers, and hospitals is arranged by the Department of Social Services for categorically eligible persons or for emergency cases only. Municipalities provide transportation for nonemergency cases from local funds.

The Medical Assistance Program and the Categorical Program Division (CPD) of the Assistant Secretariat for Ambulatory Services jointly administer the Early Periodic Screening Diagnostic and Treatment (EPSDT) program. Although children do appear to be receiving screening and required treatment services through the Family Health Clinics, which CPD operates, there exists no follow-up system for EPSDT that guarantees children will receive the services called for by the program.

**Limited Long-Term Care and Rehabilitative Services**

The Department of Social Services, under an agreement with The Department of Health, operates a number of centers and facilities that provide rehabilitative services. These are private nursing homes certified for Medicare; they do not provide Medicaid services. In rare circumstances, the Government will pay for skilled nursing services for persons 21 years of age or over through such private facilities. Similarly, the Government provides to the Medicaid population (1) a limited amount of home health care, chiefly in the form of part-time or intermittent nursing services, and (2) some health aid services that are available through public facilities.

Medicaid recipients depend primarily on families and friends for long-term care services. This dependence is thought by many to be a product of Puerto Rico's culture and not necessarily the result of service inadequacies in the public sector. Whatever the case, the omission of long-term care services tends to keep Medicaid expenditures at lower levels than they otherwise would be. There has been increasing pressure in Puerto Rico, partly from the increasing number of "working poor" families, where both the husband and wife work, to start a publicly funded long-term care program.

In addition to long-term care services, the following services also are not available under Medicaid in Puerto Rico: podiatrists, optometrists, private duty nursing, hearing aids, and services for the mentally retarded.

## Health Care Services Utilization

### Hospital Utilization

As Table 5 shows, between 1972 and 1977 there were significantly more admissions per 1,000 inhabitants to private hospitals than to public hospitals.

In 1976-1977 there were 116 admissions and 728 patient days for every 1,000 inhabitants. Of this total, the public hospitals, which account for 50.5 percent of all beds, were responsible for 44 percent of the admissions and 45 percent of the patient days. The total number of patient days in both sectors decreased 15 percent per year (130 patient days) between 1972 and 1977. However, the public sector has been responsible for almost all of this decrease (124 of the 130 patient days).

Between 1972 and 1977, the average length of stay (Table 6) declined 21 percent (from 8.1 to 6.4), in the public sector, and 8 percent in the private sector (from 6.6 to 6.1). As a result of these trends, by 1978,

the public and private sectors had nearly identical average lengths of stays.

It is important to note that the average stay in public hospitals is probably not comparable on a case-adjusted basis to the average length of stay in private hospitals because public hospitals get only the seriously ill persons who are referred from the lower levels of care.

The average occupancy rate for all general hospitals was 67.5 percent in 1977, the latest year for which data are available. These rates, however, vary significantly across the two sectors, 59.5 percent in the public sector and 89.0 percent in the private sector. The low utilization rate in the public sector is attributable to small public clinic-hospitals which maintain beds for local emergencies rather than for provisions of general hospital services to the seriously ill. The occupancy rate in the public sector decreased from 63.9 percent in 1972 to 59.5 percent in 1977. In sharp contrast, the private sector occupancy rate increased from 81.3 to 89.0 percent in 1977.

TABLE 5

Admissions and Patient-Days for Every 1,000 Inhabitants  
In General Hospitals by Type of Hospital, 1972-73 to 1976-77

Type of Hospital	Admissions/1,000 Inhabitants					Change from 1972 to 1977
	1972-73	1973-74	1974-75	1975-76	1976-77	
<b>Puerto Rico</b>						
Government Hospitals	55	54	53	50	51	- 4
Private Profit and Nonprofit Hospitals	62	64	67	68	65	3
<b>TOTAL</b>	<b>117</b>	<b>118</b>	<b>120</b>	<b>118</b>	<b>116</b>	<b>- 1</b>
<b>United States<sup>1</sup></b>						
<b>TOTAL</b>	<b>156</b>	<b>158</b>	<b>163</b>	<b>161</b>	<b>169</b>	<b>13</b>
<b>Patient-Days/1,000 Inhabitants</b>						
<b>Puerto Rico</b>						
Government Hospitals	449	429	401	348	325	- 124
Private Profit and Nonprofit Hospitals	409	426	434	430	403	- 6
<b>TOTAL</b>	<b>858</b>	<b>855</b>	<b>834</b>	<b>778</b>	<b>728</b>	<b>- 130</b>
<b>United States<sup>1</sup></b>						
<b>TOTAL</b>	<b>1,212</b>	<b>1,227</b>	<b>1,249</b>	<b>1,230</b>	<b>1,231</b>	<b>19</b>

Source: Statistical Hospital Data, 1973-74, 1974-75, 1975-76, Annual Statistical Hospital Report, 1976-77 from the Puerto Rican Health Planning Board.

<sup>1</sup>National Center for Health Statistics, United States.

**TABLE 6**  
**Average Stay and Occupancy Rate in General Hospitals by Type**  
**of Hospital 1972-73 to 1976-77**

Type of Hospital	Average Stay					Average Stay Change from 1972 to 1977
	1972-73	1973-74	1974-75	1975-76	1976-77	
<b>Puerto Rico</b>						
Government Hospitals	8.1	7.3	7.6	7.0	6.4	- 1.7
Private Profit and Nonprofit Hospitals	6.6	6.6	6.5	6.3	6.1	- .5
<b>United States<sup>1</sup></b>						
Total	7.8	7.8	7.7	7.7	7.6	- .2
	Occupancy Rate					Occupancy Rate Change from 1972 to 1977
	1972-73	1973-74	1974-75	1975-76	1976-77	
<b>Puerto Rico</b>						
Government Hospitals	63.9	65.1	63.4	60.7	59.5	- 4.4
Private Profit and Nonprofit Hospitals	81.3	82.3	86.8	82.3	89.0	7.7
<b>United States<sup>1</sup></b>						
Total	75.4	75.3	74.8	74.4	73.6	- 1.8

Source: Statistical Hospital Data, 1973-74, 1974-75, 1975-76, Annual Statistical Hospital Report, 1976-77  
<sup>1</sup>American Hospital Association, 1979 Edition

### Physician Utilization

The Department of Health; Office of Planning, Evaluation and Development, conducted studies regarding the annual physician visits in the public and private sectors. According to a recent annual study, there were 14.4 million visits to physicians in 1980, which represents an average of 4.1 per person, per year (see Table 7).

Women are more likely to visit the doctor (4.8 visits) than men (3.4 visits). In urban areas, there are more visits to physicians (4.3) per year than in the rural areas (3.9). This is primarily because urban area services are more accessible than rural area services. There is a tendency for families of lower income to visit the doctor with greater frequency (4.5 visits) than those with higher incomes (4.1 visits). Data on private insurance plans (Table 8) showed higher rates of visits to physicians in the private sector than are shown in Table 7 for the total population.

**TABLE 7**  
**Annual Visits to Physicians by Selected**  
**Characteristics Puerto Rico, 1980**

Characteristics	Visits Per Person
Total Visits	4.1
<b>Sex</b>	
Male	3.4
Female	4.8
<b>Residential Zone</b>	
Urban	4.3
Rural	3.9
<b>Annual Family Income</b>	
Less than \$1,000	4.5
\$1,000-2,999	4.2
3,000-4,999	4.3
5,000-6,999	3.7
7,000-9,999	4.3
10,000 or more	4.1

Source: Department of Health; Office of Planning, Evaluation and Development, December 1980. Preliminary Data of the Master Sample, 1980

**TABLE 8**

**Visits to Physicians by Selected Insurance Plans  
Puerto Rico, 1979-80**

Plans	Client Visits Per Year
Seguro de Servicios de Salud <sup>1</sup>	5.4
Blue Cross	7.2
Auxilio Mutuo	3.8

Source: Department of Health, Office of Planning, Evaluation and Development, Master Sample Survey.

<sup>1</sup>Member of National Association of Blue Shield Plans.

**Public Health Care Expenditures**

The Puerto Rican Government spent approximately \$210.5 million from Commonwealth funds for the provision of public health care in fiscal year (FY) 1980. This represented approximately 10 percent of the Commonwealth's total annual budget.

Table 9 shows that Puerto Rico provides 82.7 percent of Medicaid expenditures from its funds. Selected State data is provided for comparative purposes.

Texas, Ohio and Mississippi all had Medicaid *per capita* expenditures similar to that of Puerto Rico (\$54.44); however, the Federal proportion of the contribution was vastly different. As previously mentioned, the Federal contribution in Puerto Rico was

only 17.3 percent (\$9.41) while the State contribution was 82.7 percent. In Texas, Ohio, and Mississippi, the Federal contribution was 62.9 percent, 55.7 percent and 80.3 percent, respectively.

In 1979 Puerto Rico had 6.6 percent of all U.S. Medicaid recipients but accounted for only 0.4 percent of all Medicaid expenditures. Additionally, the average payment per recipient for Puerto Rico was \$124 compared to \$1,014 for all other Medicaid jurisdictions in the United States.

Table 10 presents the number of recipients receiving Medicaid services in Puerto Rico by basis of eligibility category and Table 11 presents the corresponding payment data. As is shown in these tables, for 1979, the majority of recipients (87.6 percent) and payments (88.9 million) are concentrated in the "Medicaid only" group. Within the "Medicaid only" group, over 47.6 percent are concentrated in the "Other Title XIX" category.

The primary reason that the "Other Title XIX" group is so large compared to the much smaller proportions reported by other Medicaid jurisdictions is that Puerto Rico is unable to separate individuals that are not eligible for Medicaid but who are covered out of Commonwealth-only funds. Hence, for all practical purposes, the HCFA reports filed by Puerto Rico upon which these tables are based represent all public health care recipients in Puerto Rico minus a slight undercount produced by the 1 percent sample methodology described earlier in this article.

**TABLE 9**

**Comparison of Total Medicaid Expenditures, Federal and State Share  
Fiscal Year 1979**

	Medicaid					Federal Share			State Share		
	Population (million)	Total Expenditures (million)	Average Expenditure Per Medicaid Recipient	Per Capita Spent on Medicaid	Percent	Total Expenditures (million)	Per Capita Spent on Medicaid	Percent	Total Expenditures (million)	Per Capita Spent on Medicaid	Percent
New York	17.648	\$3,286.2	\$1,689	\$186.21	100	\$1,522.5	\$86.21	48.6	\$1,196.3	\$67.79	51.3
California	22.694	2,618.0	774	115.36	100	1,104.1	48.65	49.7	1,140.7	50.28	50.3
Maryland	4.148	306.6	871	73.92	100	132.2	31.87	44.5	169.9	40.96	55.4
Texas	13.380	716.1	1,275	53.52	100	450.3	33.65	62.9	265.8	19.87	37.1
Ohio	10.731	532.8	923	49.85	100	296.6	27.64	55.7	236.2	22.01	44.3
Mississippi	2.429	136.7	226	56.28	100	109.8	45.20	80.3	26.9	11.07	19.6
Puerto Rico	3.187	173.5 <sup>1</sup>	124	54.44	100	30.0	9.41	17.3	143.5	45.03	82.7

Source: Office of Financial and Actuarial Analysis, Bureau of Data Management and Strategy, Health Care Financing Administration.

<sup>1</sup>Includes public expenditures for Medicaid services but not reported as such due to the limited amount necessary to report to reach the Federal cap.

**TABLE 10**  
**Recipients by**  
**Basis of Eligibility and**  
**Maintenance Assistance Status:**  
**Number and Percent of Total by Fiscal Years: Puerto Rico**  
**1975-1979**

Fiscal Year <sup>1</sup>	Number (in millions)														
	Total For Fiscal Year	Total	Age 65 and over	Blindness	Permanent and Total Disability	Dependent Children under 21	Adults in Families with Dependent Children	Other Title XIX Recipients	Total	Age 65 and over	Blindness	Permanent and Total Disability	Dependent Children under 21	Adults in Families with Dependent Children	Other Title XIX Recipients
1975	1.7	.2	(Z)	(Z)	(Z)	.1	(Z)	N/A	1.4	(Z)	(Z)	(Z)	.3	.2	.9
1976	1.5	.1	(Z)	(Z)	(Z)	.1	(Z)	N/A	1.3	(Z)	(Z)	(Z)	.4	.2	.7
1977	1.7	.2	(Z)	(Z)	(Z)	.1	(Z)	N/A	1.5	(Z)	(Z)	(Z)	.3	.2	.9
1978	1.6	.2	(Z)	(Z)	(Z)	.1	(Z)	N/A	1.4	(Z)	(Z)	(Z)	.3	.2	.8
1979	1.4	.2	(Z)	(Z)	(Z)	.1	(Z)	N/A	1.2	.0	(Z)	(Z)	.3	.2	.7
Change from FY 1975 to FY 1979	-.3	.0	N/A	N/A	N/A	.0	N/A	N/A	-.2	N/A	N/A	N/A	.0	.0	-.2
Annual Compound Rate of Growth	-4.7%	.0%	N/A	N/A	N/A	.0%	N/A	N/A	-3.8%	N/A	N/A	N/A	.0%	.0%	-6.1%
Money Payments Authorized ("Cash Assistance")															
Money Payments Not Authorized ("Medicaid Only")															
Percent of Total <sup>2</sup>															
1975	100.0	13.1	.4	(Z)	.3	8.5	3.9	N/A	86.9	1.8	.2	.9	19.7	11.4	52.9
1976	100.0	9.1	.2	(Z)	.4	5.9	2.6	N/A	90.9	1.4	.1	1.3	25.2	11.5	51.4
1977	100.0	12.5	.2	.1	.9	7.8	3.5	N/A	87.3	.7	.1	2.2	17.1	14.6	52.6
1978	100.0	11.4	.1	.1	.9	6.8	3.5	N/A	88.8	.7	.1	6.2	19.7	13.9	48.2
1979	100.0	12.5	.0	(Z)	1.0	6.9	4.6	N/A	87.6	.0	(Z)	.2	23.1	16.7	47.6
Percent of total change from FY 1975 to FY 1979	.....	-.6	-.4	N/A	.7	-1.6	.7	N/A	.7	-1.8	N/A	-.7	3.4	5.3	-5.3

Source: Office of Financial and Actuarial Analysis, Bureau of Data Management and Strategy, Health Care Financing Administration.  
 (Z) Indicates a number or percentage less than .05.  
 N/A = Not Applicable.  
<sup>1</sup>Percentages and numbers may not total due to rounding.



Between 1975 and 1979 total payments for Medicaid-only recipients increased \$37.7 million, from \$116.6 million in 1975 to \$154.3 million in 1979. The annual compound growth rate was 7.3 percent. The major source of this change occurred in the Aid to Families with Dependent Children (AFDC) recipients category (\$23.6 million of the \$37.7 million growth). The annual compound growth rate for AFDC was 43.1 percent. The most drastic increase in total payments (16 percent) occurred between 1978 and 1979. This change, however, may be due to the manner in which Puerto Rico's reporting staff classified the recipients in those years as opposed to any real shift.

### Recipients and Payments

Table 12 shows the amount of payments by type of medical service. The largest and fastest growing type of service was hospital inpatient service which grew from \$44.0 million in FY 1975 to \$70.1 million in FY 1979. In percentage terms, inpatient service payments grew from 34.0 percent of total payments in FY 1975 to 40.4 percent in FY 1979. Visits to physicians (clinic care) also increased \$9.4 million from \$31.5 million in FY 1975 to \$40.9 million in 1979. However, in percentage terms, physicians' services decreased .8 per-

cent as a percentage of total payments.<sup>7</sup> Payments for prescribed drugs registered a \$22.0 million increase, from \$25.0 million in FY 1975 to \$47.0 million in FY 1979. As a consequence, drug payments increased 7.8 percent as a proportion of total payments between FY 1975 (19.3 percent) and FY 1979 (27.1 percent).

Table 13 shows the number and percentage distribution of recipients by type of medical services. The total number of recipients decreased .3 million between FY 1975 and FY 1979, from 1.7 million to 1.4 million. Physicians' services (clinic usage) showed the largest increase of any service type. Physicians' services were delivered to 70.6 percent of all recipients in FY 1975 and 99.5 percent in FY 1979.<sup>8</sup> The only other increase in services was in laboratory/radiology services which showed a .1 million growth, from .2 million in FY 1975 to .3 million in FY 1979.

Prescribed drugs and "other care" category recipients declined by .2 million persons each. The annual decrease was 4.9 percent for prescribed drugs recipients and 9.6 percent for "other care" recipients.

<sup>7</sup>Physicians' services are the expenditures for primary health care clinics.

<sup>8</sup>This can be interpreted to mean that almost all Puerto Rican Medicaid recipients are treated, at least once during the year, in a health clinic.

**TABLE 12**  
**Amount of Medical Vendor Payments by Type of Medical Service and Percent of Total by Fiscal Years: Puerto Rico 1975-1979<sup>1</sup>**

Fiscal Year	Numbers in Million						
	Total Payments	Inpatient Services General Hospital	Physician Services	Dental Services	Laboratory & Radiology	Prescribe Drugs	Other Care
1975	\$129.2	\$44.0	\$31.5	\$ .9	\$5.5	\$25.0	\$22.3
1976	137.8	46.4	32.7	1.5	6.5	31.3	19.5
1977	145.2	53.3	32.9	1.7	6.4	35.7	15.2
1978	149.5	71.9	34.0	1.4	6.6	31.9	3.7
1979	173.5	70.1	40.9	1.7	8.6	47.0	5.2
Change from FY 1975 to FY 1979	44.3	26.1	9.4	.8	3.1	22.0	- 17.1
Annual Compound Rate of Growth	7.7%	12.4%	6.8%	17.2%	11.8%	17.1	- 30.5
Percent of Total							
1975	.....	34.0	24.4	.7	4.3	19.3	17.3
1976	.....	33.7	23.7	1.1	4.7	22.7	14.2
1977	.....	36.7	22.7	1.2	4.4	24.6	10.4
1978	.....	48.1	22.8	.9	4.4	21.3	2.5
1979	.....	40.4	23.6	1.0	5.0	27.1	3.0
Change from FY 1975 to FY 1979	.....	6.4	-.8	.3	.7	7.8	- 14.3

Source: Office of Financial and Actuarial Analysis, Bureau of Data Management and Strategy, Health Care Financing Administration

<sup>1</sup>Percentages and number may not total due to rounding.

**TABLE 13**

**Recipients by Type of Medical Service  
and Percent of Total by Fiscal Years: 1975-1979<sup>1</sup>**

Numbers in Million							
Fiscal Year	Total	Inpatient Services General Hospital	Physician Services	Dental Services	Laboratory & Radiology	Prescribe Drugs	Other Care
1975	1.7	.1	1.2	.1	2	1.1	.6
1976	1.5	.1	1.1	.1	.2	1.0	.5
1977	1.7	.1	1.3	.1	.3	1.2	.7
1978	1.5	.1	1.3	.1	.4	1.0	.7
1979	1.4	.1	1.4	.1	.3	.9	.4
Change from FY 1975 to FY 1979	-.3	.0	.2	.0	.1	-.2	-.2
Annual Compound Rate of Growth	-4.7%	.0	3.9%	.0	11.0%	-4.9%	-9.6%
Percent of Total							
1975	.....	5.9	70.6	5.6	11.8	64.7	35.3
1976	.....	6.7	73.3	6.7	13.3	66.7	33.3
1977	.....	5.9	76.5	5.9	17.6	70.6	41.2
1978	.....	6.7	86.7	6.7	26.7	66.7	46.7
1979	.....	7.1	99.5	7.1	21.4	64.3	28.6
Change from FY 1975 to FY 1979	.....	1.2	28.9	1.2	9.6	-.4	-6.7

Source: Office of Financial and Actuarial Analysis, Bureau of Data Management and Strategy, Health Care Financing Administration.

<sup>1</sup>Percentages and number may not total due to rounding.

## Average Payments By Type of Service

Table 14 shows the average payment per recipient by type of medical services from FY 1975 to FY 1979. The total payment per recipient increased \$46.21 over the five-year period; the annual compound rate increase was 12.4. The number of recipients receiving inpatient services remained unchanged between FY 1975 and FY 1979. However, the per recipient medical vendor payments for inpatient services increased by \$672.99 over this period. Physicians, laboratory/radiology, and prescribed drugs also increased by \$3.47, \$5.11, and \$29.98, respectively. The "other care" services had a decrease of \$25.26 for the same five-year period. This "other care" service change may have resulted from a shift in the reporting of service types by the Puerto Rican Medicaid staff.

## Conclusions

The Puerto Rican Medicaid program is unlike any other U.S. Medicaid program. In 1979, it served approximately 1.4 million recipients of Puerto Rico's 3.2 million inhabitants. The Commonwealth government is the main provider of health services for the medically indigent population. Thus, Medicaid services are provided exclusively through Commonwealth and Municipal Government health facilities. In addition, Puerto Rico's Medicaid program was "capped" by Congress two years after its inception.

The data in this study clearly show major differences between the Puerto Rican and U.S. Medicaid

programs. In terms of Medicaid expenditures, Puerto Rico delivers health care at far lower expenditures per recipient than U.S. programs. For example, in 1979, the average Medicaid expenditure per recipient in Puerto Rico was \$124 whereas in the United States the average Medicaid expenditure per recipient was \$1,014. In spite of the low average expenditure per recipient and the lack of provision for some of the services mandated by Medicaid, health status measures (e.g., mortality rates, infant mortality, prenatal care) compare favorably with those of the U.S.

What accounts for these differences?

First, Puerto Rico appears to be administering its Medicaid program in an effective way. The most important administrative differences identified are:

- (a) The publicly-owned and operated health care structure which allows for control of utilization, professional salaries, etc.
- (b) The lack of freedom of choice of providers. (That is, recipients must use the publicly-owned and operated system).
- (c) The vertical integration of Puerto Rico's health care system which minimizes duplication and, through the referral system, maintains tighter utilization control.
- (d) The lack of long-term care services which are the most expensive and fastest growing component of the U.S. Medicaid program's expenditures.

These administrative features appear to operate together to discourage utilization and encourage cost savings.

TABLE 14

Average Payments Per Recipient in Puerto Rico  
by Type of Medical Service by Fiscal Years:  
1975-1979

Fiscal Year	Numbers in Million						
	Total	Inpatient Services General Hospital	Physician Services	Dental Services	Laboratory & Radiology	Prescribe Drugs	Other Care
1975	\$ 77.71	\$ 328.03	\$25.39	\$ 9.44	\$22.45	\$22.47	\$38.09
1976	94.95	377.48	30.63	18.33	31.16	32.66	38.67
1977	87.20	421.27	25.76	16.59	19.04	29.28	20.92
1978	100.31	861.35	25.70	15.20	14.79	31.45	5.61
1979	123.92	1,001.02	28.86	29.97	27.56	52.45	12.83
Change from FY 1975 to FY 1979	46.21	672.99	3.47	20.53	5.11	29.98	- 25.26
Annual Compound Rate of Growth	12.4%	32.2%	3.3%	33.5%	5.3%	23.6%	- 23.8%

Source: Office of Financial and Actuarial Analysis, Bureau of Data Management and Strategy, Health Care Financing Administration.

The second major factor that seems to account for the Puerto Rican Medicaid program's unique characteristics is cultural. Therefore, the lessons which can be drawn from the Puerto Rican Medicaid program experience are somewhat unclear. For example, the ability of the program to avoid implementation of a long-term care program by dependence on extended family care is inherent in the culture of Puerto Rico.

It is obviously not possible to conclude that a Medicaid program like the one in Puerto Rico can either be implemented or expected to work in the United States, due to vast economic and cultural differences. However, operating Medicaid in a tightly structured way, as in Puerto Rico, resulted in a relatively low cost health care system and the outcome—measured by mortality rates—appears at least as favorable as the Medicaid programs elsewhere.

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