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HEALTH SERVICES FOR LOW-INCOME FAMILIES: EXTENDING COVERAGE THROUGH PREPAYMENT PLANS IN THE DOMINICAN REPUBLIC

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ABSTRACT

This study explores the potential for extending health services to low-income families in Santo Domingo through private, prepaid HMO-type health plans known as *Igualas Médicas*. Since their founding in the late 1960s and early 1970s, the Igualas have demonstrated impressive growth and increasing market share. The growth has occurred in the lower-end market of minimum wage employees in small and mid-size firms and parastatals. Based on a sample of eight Igualas, this report examines the strengths and weaknesses of these prepayment plans as extension mechanisms. Several features of these plans are reviewed: ownership, organization, provider arrangements, benefit packages, premium structures, membership characteristics and cost containment procedures.

Lending associations that provide loans to informal sector microenterprises are another major focus. The report identifies two associations which could serve as grouping mechanisms for microenterprise owners, workers, and dependents. Through an analysis of Iguala and lending association operations, this report explains the financial and administrative arrangement whereby the Igualas can be matched with this large yet specific segment of the informal work force. Currently, these groups receive what is widely regarded as inadequate health care at state health facilities or pay high-priced, fee-for-service practitioners.

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EXECUTIVE SUMMARY

This report explores the potential for extending health services to low-income families residing in Santo Domingo through prepaid HMO-type health plans known as Igualas Médicas. Igualas are private firms that combine the financing and service delivery aspects of health care. Lending associations that provide loans to informal sector microenterprises are another major focus. Through an analysis of Iguala and lending associations' operations, this report seeks to explain the financial and administrative arrangements whereby the Igualas can be matched with a large yet specific segment of the informal work force, microenterprise entrepreneurs and employees. Currently, these groups receive what is widely regarded as inadequate health care at state health facilities or pay out-of-pocket for private care.

The Igualas are not insurance institutions in a strict sense. That is, they are not mechanisms that focus solely on protecting the individual against catastrophic financial loss due to an illness- or injury-causing event. Similar to U.S.-based HMOs, the Igualas integrate the insurance and provider functions. They are prepayment systems that cover a specified volume and range of services. In exchange for a predetermined monthly premium, the Igualas offer their members a fixed package of outpatient and inpatient medical services.

Eight of the largest of a total of twenty Igualas operating in Santo Domingo were sampled in June 1990. Taken together, the sample represents approximately 75 percent of the Iguala-insured population in Santo Domingo. Most Igualas are physician owned and operated. Many are affiliated with a single hospital and a specific group practice. Others are linked to a broad network of facilities and providers.

Igualas have existed for over twenty years in the Dominican Republic. Although concentrated in Santo Domingo, the Igualas also provide coverage in other urban areas. In general, the Igualas are successful business enterprises because they have captured a large segment of the middle- and working-class population through employer-based group plans. They have been particularly successful in selling their product to small- and middle-size companies. This report surveys a cross section of benefit packages designed for low-income employees. In comparison to indemnity insurance plans, the Igualas offer a

similar or superior benefit package for a lower premium. Unlike indemnity insurance, however, Iguala enrollees are required to utilize a restricted number of facilities and physicians. However, the Igualas' success in the marketplace shows that they fulfill an important need that consumers are not able to meet through the public sector, social security, indemnity insurance companies, or fee-for-service private providers.

Further, unlike the client orientation of traditional insurance companies that shape benefits to the needs of the individual or group, the Igualas appear to be primarily oriented to the income needs of their physician owners and associates. Most Igualas were founded by a group of physicians as a means to channel a greater volume of patients to their private practices. Risk exposure is limited through copayments, steep discounts from providers, and coverage restrictions. Because of the physician orientation of most Igualas, cost containment is still in a developmental stage. Many Iguala executives are eager to learn more about managed care and cost containment practices in the U.S.

Two lending associations that provide loans to informal sector microenterprises were studied. These organizations are interested in providing health coverage to their members through the creation of a risk pool consisting of microenterprise owners, employees, and dependents. Executives from both organizations have offered their network of field "promoters" as a means to market a plan and to collect premiums. Some executives suggest that premiums should be incorporated into the loan principals to facilitate collection. Iguala representatives have also expressed interest in bidding for all or part of the potential microenterprise risk pool. Because of the excess capacity of their provider networks, many Igualas seek greater volume.

This report concludes that USAID has an opportunity to facilitate a match between lending associations and the Igualas Médicas to provide health coverage to a potential population of 100,000 people in Santo Domingo. It is recommended that USAID facilitate the creation of the lending association-based risk pool and assist the Igualas in setting up the provider network and in designing the appropriate (and affordable) benefit package. Three extension models are suggested. A pilot project is proposed whereby at least two of the models are tested on a demonstration basis.

Two issues will need further study before coverage is extended. The first involves the question of adverse selection. That is, if the scheme is voluntary, the most ill will be the most likely to enroll. A survey of potential enrollees

will be needed to determine demographic and socioeconomic characteristics together with the distribution of illness and utilization patterns. The data will be compared with similar characteristics of the actual enrollees to determine selection bias. Such a survey can also provide a better understanding of the potential market for Iguala services by estimating future subscribers' current expenditure and use patterns and comparing these to what would be feasible under Iguala coverage. In order to avoid having the plan enroll a large proportion of ill members, membership may need to be compulsory for all owners and employees of microbusinesses affiliated with a lending association. A second issue involves risk-sharing arrangements between the Igualas and the lending associations. It is suggested that the lending associations assume the risks of premium collection while the Igualas assume the risks of service delivery to the members.

1.0 BACKGROUND

1.1 INTRODUCTION

Faced with a severe economic crisis, declining government budgets, rising costs of supplies, and a highly inefficient and poorly managed health system, the future of state-supported health services in the Dominican Republic looks bleak. In the early 1980s, the Ministry of Health (SESPAS) claimed to cover 80 percent of the country's population. Recent evidence suggests that coverage has dropped to half that amount. Despite proposals to extend social security to uncovered groups, the Social Security Institute (IDSS) has failed to act, and continues to lag far behind its counterparts elsewhere in the region, covering less than five percent of the population.

Policymakers and health planners both in and out of government are searching for alternative financial and organizational mechanisms to meet existing and future health needs. Through the HFS Project, USAID commissioned this study to examine alternative approaches to extending health services to low-income families underserved by SESPAS and excluded by IDSS. The terms of reference directed HFS to assist USAID/Santo Domingo to conceptualize future technical assistance activities involving the private medical sector. Specifically, USAID/Santo Domingo requested that HFS research and document the role that private, HMO-like prepayment plans, known as "Igualas Médicas," can play in extending basic health services to low-income workers and their families residing in Santo Domingo. In addition, HFS was directed to: 1) assess the Igualas in terms of coverage, organizational capacity, expansion capability, financial status and cost containment; 2) recommend how these plans can be extended to beneficiaries of other USAID programs in Santo Domingo, such as workers in informal-sector microenterprises; and 3) advise how current benefit packages of the Igualas could be modified to include preventive and promotional services.

Similar to Health Maintenance Organizations (HMOs) in the United States, the Igualas are private companies involved in the organization, financing, and delivery of health care. The Igualas sell group health plans to employers and employees for a fixed monthly premium, and in return provide a specified set of benefits or medical services to these enrollees. Many Igualas have nearly 20 years of experience serving salaried middle-income employees and low-income workers.

USAID/Santo Domingo's interest in Igualas Médicas dates to 1985. At that time, the Mission assessed the Igualas and indemnity insurance companies operating in the Dominican Republic to identify opportunities for USAID support to extend coverage to low-income groups (Harder, 1985a,b). Based on this assessment, other USAID-funded studies have outlined strategies, potential designs, and technical assistance for a subproject component within the Mission's current PVO Co-Financing Project (Ramey, 1985, Schneider and Wolff, 1989). In general, these reports focused on designing a cooperative agreement between USAID and selected Igualas. USAID would provide technical assistance for strengthening the Igualas in terms of management, cost control, quality assurance, and actuarial and marketing capabilities. At the same time, consultants recommended that USAID assist private providers in obtaining lines of credit or access to surplus medical equipment to technologically upgrade facilities which provide services to Iguala enrollees. Significantly, identification of potential beneficiary groups was less specific and was often couched in terms of fostering Iguala-based marketing strategies. How coverage would be extended to these groups was never specified. The consultants recommended that technical assistance be provided to the Igualas to identify employers and trade associations (with low-income workers or members), and relatedly, to market a basic health package (including preventive and promotional services) to these groups.

This study builds on these previous studies and project documents, while updating USAID's knowledge of the current financial and service-delivery realities of the Igualas. At the same time, it attempts to identify the capabilities, limitations, and willingness of the Igualas (and their affiliated providers) to extend services to uninsured, low-income groups. This study departs from previous reports in the sense that it identifies and examines a specific yet large pool of uninsured workers (and their families). These workers are employed by "informal-sector" microenterprises located in low-income and impoverished areas of Santo Domingo.

This report presents several operational models through which medical coverage can be extended to this group. This paper argues that a significant number of informal sector workers and their families can be adequately and affordably covered by Iguala-based, prepayment medical plans through a group policy administered by microenterprise lending associations.

1.2 THE SAMPLE

Based on previous studies (Duarte, Gómez, La Forgia, and Molina, 1988; Harder, 1985a) and the author's knowledge of the Igualas, a sample of the eight largest Igualas was selected for this study. These Igualas are relatively prestigious, well-established, and taken together, represent approximately 75 percent of the Iguala-covered population in the metropolitan area. These Igualas had already been identified by Harder (1985) as economically viable organizations with sufficient organizational capacity and provider networks to extend services to populations presently covered by the public system. For comparative purposes, the largest indemnity insurance company in the Dominican Republic, was included in the sample. At the request of the Mission, a recently created staff-model Iguala was also examined. A list of the sampled Igualas follows:

ADSME: Administración de Servicios Médicos

GMA: Grupo Médico Asociado

GMC: Grupo Médico Centro

PRIMAG: Plan de Igualas Médicas Alcántara & González

SDS: Servicios Dominicanos de Salud

SEMMA: Seguro Médico Para Maestros

SIMAG: Servicios de Igualas Médicas

SML: Servicios Médicos Latinos

The author conducted in-depth interviews with each firm's president and/or chief administrator. The firms provided documentation on the number of enrollees (and companies), types of services covered, exclusions, premiums, copayments, type and location of providers, etc. The author also met with owners and administrators of several hospitals/clinics under contract with the Igualas, and on a more informal basis, with physicians affiliated with the Igualas.

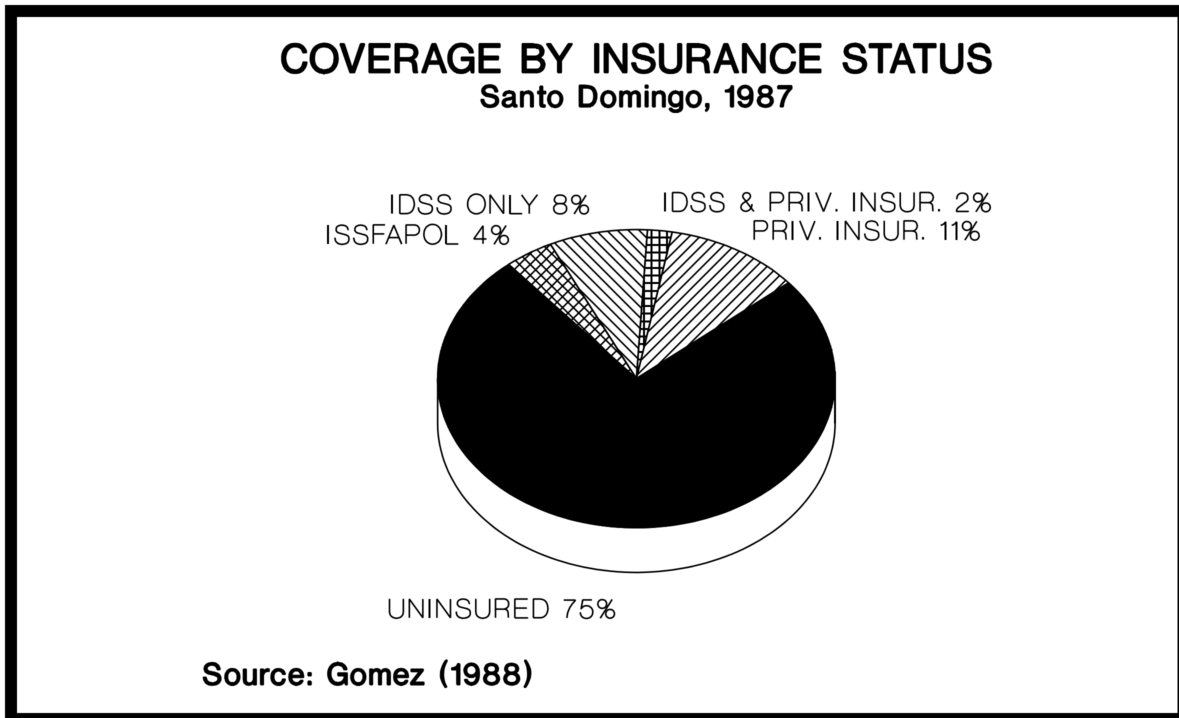
In an attempt to identify organizations that potentially could serve as grouping mechanisms (to create risk pools) for extending Iguala-based coverage,

the author assessed two microenterprise credit associations. These associations lend money and provide an array of services to a large number of micro-businesses in the low-income areas of Santo Domingo. Interviews were conducted with senior executives and field staff.

1.3 PUBLIC AND PRIVATE SECTOR COVERAGE AND UTILIZATION

Before proceeding, it is useful to examine the coverage and utilization patterns among the various health subsectors in Santo Domingo. Based on a 1987 household survey of health care consumption, Gómez (1988) estimated that approximately 11 percent of the 1.8 million people residing in metropolitan Santo Domingo were enrolled in private prepayment plans such as Igualas and indemnity insurance companies (See graph below). An additional 12 percent were covered by government-affiliated social security funds for workers (IDSS) and military personnel (ISSFAPOL). Approximately two percent of respondents reported double affiliation with IDSS and a private carrier. Seventy-six percent of the population were not enrolled in any social security system or prepayment plan. Although in theory this latter group is covered by the Health Ministry (SESPAS), Gómez found that 50 percent of outpatient visits and 46 percent of hospitalizations by uninsured users were provided in private settings. SESPAS provided 42 percent and 46 percent of outpatient and inpatient services, respectively, to the uninsured. Because of the deteriorating condition of SESPAS facilities and a series of job actions, it is generally accepted that utilization of SESPAS services has decreased significantly since 1987.

EXHIBIT 1



PART I: IGUALAS MEDICAS

2.0 OVERVIEW

Igualas are private HMO-type companies that combine financing, organizational, and health delivery functions to provide comprehensive services to enrollees. Essentially, they are prepaid plans that to varying degrees manage the care that they finance. Igualas tend to focus on group plans which are sold to relatively small and mid-size companies. Presently there are over 20 Igualas in the Dominican Republic providing services to approximately 450,000 subscribers (including dependents). Most Igualas have between 10 and 20 years of experience. Since their beginning in the late 1960s, the Igualas have displayed an impressive growth rate regarding the number of firms and market share.

Since preventive services are not a major feature of most Igualas, Igualas can best be described as health management organizations. "Iguala" refers to the "equal" monthly fee contributed by (and shared between) employer and employee in return for a predetermined range of health services. Igualas offer more comprehensive coverage for a lower premium than indemnity insurance companies.

Igualas are prepayment systems which cover "certain" future events (Mills, 1983). In other words, payment of the premium entitles the enrollee to a specified quantity of services (e.g., number of outpatient visits) during a stipulated (future) time period. In contrast, traditional insurance schemes that emphasize catastrophic coverage are based on the probabilities of "unknown" future events. That is, premiums are related to the "statistical frequency with which the population covered requires care" (Mills, 1983: 67). Both prepayment and traditional insurance systems base their rates on the cost of claims, administrative costs, and profit margins.

At the same time, Iguala enrollees incur fewer out-of-pocket expenses for routine ambulatory care within predetermined utilization limits. However, out-of-pocket expenses for non-routine or more sophisticated services are common among Iguala plans. Similar to indemnity insurance, Igualas maintain payment ceilings (known as "topes") for various services. After surpassing the maximum, a patient is required to pay full charges or a copayment corresponding to a percentage of provider charges. Most Igualas offer two or three plans depending on the coverage desired and employee salary levels. Providers submit claims to the Igualas which pay them directly. Typical of HMOs, rarely do the Igualas reimburse patients. Similar to indemnity insurance, Igualas usually exclude individuals over 65 years of age and treatment for alcohol or drug abuse, AIDS, and mental disorders.

With few exceptions, the main purpose of the Igualas is to channel a relatively large volume of patients to a single hospital, and more importantly, to a relatively limited number of physicians (usually within one or two facilities). Iguala owners often state that their firms were created to provide patients for the affiliated physicians and facilities. Consequently, the range of services covered is limited to the services provided by these providers. This may exclude some specialties. The physicians agree to a reduced fee in return for a large volume, and in the case of at least two Igualas, a yearly profit distribution. Two Igualas that are affiliated with the same hospital, SEMMA and PRIMAG, pay providers on a capitation basis. Iguala-provider arrangements are discussed in the next section.

As business firms, most Igualas seek to cover fixed costs. Many have small staffs (of 15 or fewer employees) and profit margins are generally modest (Duarte, Gómez, La Forgia and Molina, 1989). In sum, the reduced fee schedules, limited overhead costs, and small profit margins have allowed the Igualas to successfully compete with the larger indemnity companies. Referring to the large

market share of the Igualas vis-à-vis the insurance companies, a consultant report (Birch and Davis, 1987) concluded:

> Igualas probably have 75 percent of the [health insurance] market for two reasons: they cost less and offer more for the money. It is impossible [for an indemnity carrier] to compete with an Iguala Médica on price, or service, for the lower [low-income] end of the market. They do not have the same administrative, marketing or profit requirements as an insurance company.

2.1 MODELS OF IGUALA SERVICE DELIVERY

As is generally the case for HMOs, the Igualas provide services at designated providers and facilities. All Igualas cover a full range of inpatient and outpatient services. (Services are described in a later section). The number of providers depends on the type and quantity of contractual arrangements. However, taken together, the Igualas do not resemble any particular HMO or managed care model. Some Igualas are similar to staff-model HMOs, others resemble two- and three-tiered Independent Practice Association (IPA)-model HMOs. A particular arrangement often responds to the ties among the Iguala owners, physician providers, and affiliated facilities. In some cases the Igualas are owned by a small group of physicians who are also owners of the principal provider facility. In other cases, the Iguala is owned by a large group of physicians (who are shareholders) but are more or less grouped in a single facility where they rent or are provided office space. Such a facility is likely to be contracted by the Iguala to provide inpatient and diagnostic services to its enrollees. Other Igualas emulate an IPA model in which the owners negotiate contracts with a network of independent physicians and facilities. At the other extreme, a recently-created Iguala initiated a staff design HMO in which most health professionals are salaried employees of the Iguala-owned and -operated facility. Finally, one Iguala is a non-profit organization. It is administered by and for a special occupational group, public school teachers, and is financed through government contributions and salary deductions.

Four general types of Igualas were found during the study, as follows:

- Staff-Model Health Maintenance Organization (HMO)

- Two-Tiered Individual Practice Association with Single Hospital Affiliation
- Two-Tiered Individual Practice Association without Single Hospital Affiliation
- Three-Tiered Individual Practice Association

The remainder of this section examines the arrangements corresponding to the Igualas sampled for this report. The models delineate the linkages among Igualas, medical facilities, and physicians. Understanding the often obscure differences among these models is important for a later discussion in which we analyze the strengths and weaknesses of each model (and Iguala) in terms of management, cost control, provider relations, quality assurance, and ultimately the extension of coverage to low-income families.

2.1.1. Staff-Model Health Maintenance Organization (HMO)

In the Staff-Model Health Maintenance Organization (HMO), most physicians are salaried employees (see Exhibit 2). All services are provided in a single facility which is owned by the same individual or company that owns the Iguala. For all practical purposes, the facility and the Iguala are the same entity. Sub-specialists are contracted on a fee-for-service basis, but the facility provides or rents them space. Primary care physicians serve as gatekeepers to more expensive sub-specialist and hospital services. Referrals to these latter services require authorization by the facilities' medical director. Examples of this model are: Servicios Médicos Latinos (SML), and Plan de Igualas Médicas Alcántara & González (PRIMAG), which are discussed next.

EXHIBIT 2

STAFF-MODEL HEALTH MAINTENANCE ORGANIZATION (HMO)

IGUALA

			specialist
hospital	primary care physicians	*contract*	specialist
			specialist

Owned and managed by a large insurance company, Latino Americano de Seguros, SML was founded in 1988. At that time, the insurance company eliminated its traditional (indemnity) health insurance plans and opted to create an HMO-like arrangement. In an attempt to control rising medical costs, in that same year the company opened an eight-bed hospital/clinic in a remodeled building. SML, a subsidiary of Latino Americano de Seguros, manages both the hospital and the prepayment plan. Except for acute emergencies, enrollees must seek care in the SML facility. Primary care physicians, nurses, paraprofessionals, and other workers are salaried SML employees, while specialists are contracted according to a fixed fee-for-service schedule. Specialist consultations are provided in the SML facility only.

PRIMAG is owned and operated by a physician who also owns and operates the Iguala's principal provider facility. On paper, the Iguala pays a fixed fee to the hospital on a capitated basis and maintains no direct linkage to participating physicians. Instead, the hospital arranges contracts with the physicians stipulating the fee schedule for all services and procedures. All physicians are reimbursed by the hospital, not by the Iguala. Since the hospital is at risk, outpatient referral systems have been established to reduce utilization of expensive specialist services. Most general and family practitioners (known as referral physicians) are salaried, while specialists are paid according to a fixed fee schedule. Interestingly, the hospital maintains several types of contracts with participating specialists. Depending on the contract, the hospital retains 10-30 percent of physician fees for hospital maintenance and capital reserves. (The percent deduction depends on whether the physician rents office space or receives it free of charge.)

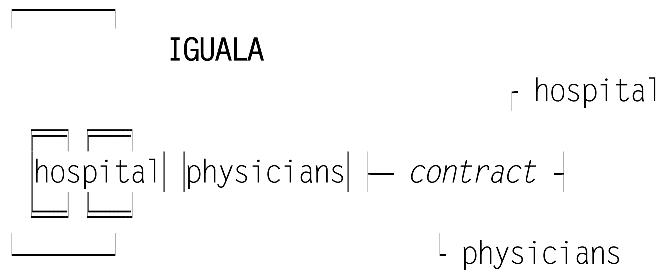
2.1.2. Two-Tiered Individual Practice Association (IPA) with Single-Hospital Affiliation

In the Two-Tiered Individual Practice Association with Single-Hospital Affiliation, the institutions are less centralized than in the former model (see Exhibit 3). Although most physicians work out of the Iguala's flagship facility, they are paid on a fee-for-service basis. They are also permitted to see non-Iguala patients. Enrollees, however, must obtain services in this facility. All physicians affiliated with the Iguala are shareholders, and any surplus is distributed yearly. Referrals among the physicians are on an informal basis. Examples of this model are : Grupo Médico Asociado (GMA) and Servicios de Igualas Médicas (SIMAG) (Type A in the exhibit); and Grupo Médico Centro (GMC) (Type B in the exhibit). These models are discussed next.

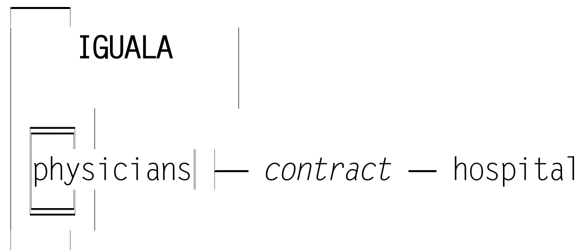
EXHIBIT 3

TWO-TIERED IPA WITH SINGLE HOSPITAL AFFILIATION

Type A



Type B



In GMA and SIMAG, participating physicians are the owners of these Igualas and are generally concentrated in a single hospital/clinic. Unlike the previous model, these Igualas (as firms) do not own a hospital, and the physicians are not salaried (schematically represented by the double-lined, inner boxes in the first

diagram). To become a partner, a physician is required to purchase a minimum number of shares in the firm. (Presently, neither Iguala is accepting new partners). Several of the largest shareholders are the founders of the Igualas and at the same time (not coincidentally) are the owners of the hospital. Although the hospital is organizationally separate from the Iguala and physician partnership, it appears that the shareholders (physicians) exert considerable influence on hospital policies and operations. Indeed, the governing boards of the Iguala and the hospital are for the most part composed of the same members.

The flagship facility, usually a mid-size hospital (60-100 beds) with a large outpatient area, is the principal site for the provision of outpatient, inpatient, and diagnostic services to Iguala enrollees. GMA and SIMAG have entered into contractual agreements with other hospitals to handle inpatient overflow, and to a lesser extent, to reduce crowding in the main facility. Recently GMA accepted into the partnership a limited number of physicians from Clínica Altagracia, a smaller facility located near the city's periphery. Interestingly, although participating physicians are generally concentrated in a single facility, no group arrangement or even formal referral system exists among them.

Participating physicians are reimbursed according to a discounted fee-for-service schedule. Profits are distributed to shareholders on a yearly basis depending on the number of shares possessed by individual partners. Profits, which are generally limited, are allocated in cash or in additional share options. Also, the physicians are permitted to provide care to private (non-Iguala) patients at the Iguala-affiliated facility.

GMC, represented as Type B in Exhibit 3, is an Iguala which is very similar to GMA and SIMAG. All participating physicians are shareholders of the Iguala. Yet unlike GMA and SIMAG, GMC is not by itself meant to be a profit-making enterprise. Its major function is to channel the enrollees (and the profits) to the 40 physician-owners. These physicians are primarily interested in the volume provided by the Iguala. After paying claims and covering administrative costs, there is usually little excess for distribution. One physician-owner cogently summarized the firm's philosophy: "he who works more, earns more." As was the case for GMA and SIMAG, despite their proximity to one another (in the same facility), the physicians operate more or less independently. Referrals are arranged informally among friends.

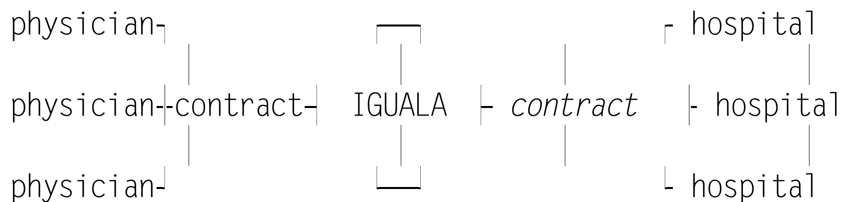
GMC does not possess a hospital. Nevertheless, it is principally affiliated with a university-operated facility in which the physician-owners have admitting privileges. Most physician-owners have offices in a privately-owned outpatient annex to the hospital. The hospital and the facility's lab and x-ray departments are under contract with GMC to provide services to Iguala patients. GMC has contracted three smaller hospitals near the city's periphery. But only a small portion of enrollees use these latter facilities.

2.1.3. Two-Tiered Individual Practice Association (IPA) without Single-Hospital Affiliation

In the Two-Tiered Individual Practice Association without Single-Hospital Affiliation, the arrangement may best be described as direct-contract IPAs (see Exhibit 4, below). They contract with a large panel of solo practitioners who are reimbursed on a fee-for-service basis. Enrollees are not permitted to seek services from a non-network physician. The Igualas also contract with a significant number of facilities throughout Santo Domingo. Examples of this model are: Servicios Dominicanos de Salud (SDS) and Administración de Servicios Médicos (ADSME), which are described next.

EXHIBIT 4

TWO-TIERED IPA WITHOUT SINGLE HOSPITAL AFFILIATION



In SDS and ADSME, which are family-owned and operated Igualas, family members participating in the firms' management are generally physicians. Unlike the previous models, these Igualas are not affiliated with a particular facility or physician partnership. They tend to have extensive provider networks in the city's center and periphery. The Igualas negotiate contracts with each facility which specify (discounted) charges, service limits, pre-admission rules, notification requirements, etc. Depending on the Igualas' ranking of a facility

in terms of quality, prestige, location, and full-charge rates, discounted rates are set. Consequently, considerable variation in rates exists among the affiliated hospitals in Santo Domingo. For example, ADSME pays RD $150 per bed-day in a relatively prestigious hospital situated in the city's center, but pays $45 per bed-day in a "second-flight" hospital located near the city's periphery. It is important to note that in both cases the patients incur no out-of-pocket expenses.[1]

Participating physicians practice out of their own offices. After an informal screening procedure, eligible physicians are placed on the Igualas' list of providers. It is understood that they will abide by the Igualas' policies, rules, and regulations and accept a discounted fee as full payment for services rendered. Physicians who attend to outpatients or admit inpatients in "second-flight" clinics receive one-third to one-half the fees (i.e., for a surgical procedure, outpatient visit, etc.) granted to their counterparts in more prestigious facilities.

Finally, both Igualas provide training to hospital administrators on claims management. As is the case for all Igualas, enrollees are required to seek care only with participating physicians and in affiliated facilities (except for emergency care).

2.1.4. Three-Tiered Individual Practice Association (IPA)

In the Three-Tiered Individual Practice Association, services are provided to a specific occupational group, namely government elementary and secondary schoolteachers (see Exhibit 5). The Iguala is jointly financed and managed by the government and the teachers. The Iguala is considered a three-tiered IPA because it contracts with individual facilities, (for a capitated amount) which in turn are responsible for providing all services. Contract arrangements with physicians are determined by the facilities. An example of this model is: Seguro Médico Para Maestros (SEMMA). Unlike all other Igualas, SEMMA does not pay physicians directly.

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[1] RD $7.28 = US $1 in July 1990.

SEMMA is a government-affiliated Iguala created in 1985 to provide medical services to the country's primary and secondary school teachers. SEMMA is administered by representatives of the Ministry of Education, Fine Arts and Culture (SEEBAC) and the Dominican Teachers' Union (ADP). (As is the case with civil servants, teachers are not covered by Social Security). Seventy-five percent of the premium is paid by the government while the remainder is deducted from teacher salaries. The teachers (and their dependents) are required to select a single hospital/clinic (from a limited list) where they receive all medical care. Unlike other Igualas, SEMMA places these facilities at full risk for all services. That is, affiliated hospitals are fully capitated for all outpatient and inpatient services stipulated in the SEMMA benefit package. SEMMA does not directly contract or receive claims from physicians. Rather, contracts (and other arrangements) which specify payment schedules for physicians and diagnostic services are devised and executed by the affiliated hospitals. Importantly, although the range of benefits is similar to those offered by other Igualas, the monthly premium is less than one-half. Consequently, because of operating deficits resulting from inflation, since 1987 several hospitals have canceled their contracts with SEMMA. Presently, only a limited number of hospitals in Santo Domingo are willing to accept SEMMA members.

EXHIBIT 5

THREE-TIERED IPA

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hospital – *contract* – **IGUALA** – *contract* – hospital

contract *contract*

physicians physicians

The few facilities which have successfully incorporated the teachers generally pay low physician fees and have established relatively tight utilization control mechanisms. These controls are described in a later section. However, it appears that quality has not been compromised. One such facility,

Hospital Alcántara & González (which also owns and operates PRIMAG), has achieved a profit through maintaining these controls and acquiring a large percentage of SEMMA enrollees in Santo Domingo (9,000 subscribers). All physicians under contract with the hospital are either salaried or receive a reduced fee for services rendered to SEMMA patients.

2.2 GENERAL CHARACTERISTICS

Exhibit 6 presents summary statistics for the sample of Igualas. For comparative purposes, data on an indemnity carrier, ALICO, are also provided. With the exception of SML and SEMMA, most Igualas have between 10 and 20 years of experience. GMA is the oldest and largest private Iguala with more than double the number of enrollees of most of its competitors. Expectedly, SEMMA is the largest Iguala, enrolling approximately 103,000 schoolteachers and their dependents. In comparison to many U.S. HMOs, the volume of enrollees appears small. Nevertheless, given the rather large network of state and social security facilities, especially in Santo Domingo, the numbers are impressive. (The Igualas claim that approximately three-quarters of enrollees reside in metropolitan Santo Domingo). There is little association between the number of affiliated companies and the number of enrollees. Some Igualas

EXHIBIT 6

IGUALAS MEDICAS: SUMMARY CHARACTERISTICS

INDICATOR	ADSME	GMA	GMC	PRIMAG	SDS	SEMMA	SIMAG	SML	ALICO (indemnity insur.)
YEAR FOUNDED	1982	1967	1973	1979	1970	1985	1977	1988	1965
TOTAL NO. OF ENROLLEES (nationwide)	30,000	70,000	41,300	10,000	34,000	103,000	41,000	4,000	60,000
TOTAL NO. OF FIRMS (nationwide)	139	200	125	50	321	schoolteachers	152	27	300
REQUIRED MINIMUM NO. OF EMPLOYEES	RD $1,000 min. monthly premium	15	50	20	30	n.a.	20	30	15
NO. OF AFFILIATED PHYSICIANS IN ST. DGO.	300	110	50	50	800	n.a.	175	24	unlimited
NO. OF AFFILIATED FACILITIES IN ST. DGO.	16	2	5	2	18	4	4	1	22
FACILITY LOCATION									
CENTER CITY:	4	1	1	0	5	1	3	0	8
PERIPHERY (a):	12	1	4	2	13	3	1	1	14
PRINCIPAL AFFILIATION W/ SINGLE FACILITY? (LOCATION)	no	yes (center city)	yes (center city)	yes (near periphery	no	no	yes (center city)	yes (near periphery	no

Note: RD $7.28 = U.S. $1 (7/90).
n.a. means not applicable.

(a) Refers to location proximate to low-income areas.

(such as SDS) focus on small and mid-size companies (50 to 500 employees). Others (such as GMC) have enrolled a few state-affiliated corporations whose employees constitute a large portion of members.

For an employer to qualify for a plan, most Igualas require a minimum number of employees, varying between 15 and 50 individuals. ADSME has set a minimum monthly premium of RD $1,000 for a group plan. PRIMAG requires a minimum of 500 enrollees (workers and dependents) to qualify for its basic or low-income plan. The foregoing limitations have been introduced since 1988 and respond to the high-inflation Dominican economy. Between 1988 and 1990, the prices for most consumer products including medicines and doctor fees more than tripled. In practice, however, Iguala executives admit that inflation has driven them to force out small firms because of the risk involved. If an Iguala incurs high medical expenses because of one enrollee in a group of 15, for example, the Iguala could take a major loss on that account. In practice, the limits (for minimum number of employees) listed in Exhibit 6 are actually higher. Currently, few Igualas are accepting new firms with fewer than 50 employees unless the latter are willing to pay a higher premium.

The number of affiliated hospitals and physicians corresponds to the above-described features of a particular model. SDS and ADSME rely on large networks of provider facilities and physicians. These Igualas approximate ALICO which presently does not restrict enrollee access to providers. Many solo practice physicians accept patients from more than one Iguala and insurance company. Others do not accept insurance payments of any kind. The majority of Igualas have a limited network of providers and in most cases are mainly affiliated with a single facility. As mentioned earlier, most participating physicians are located there. Other facilities serve as overflow sites for inpatient, and to a lesser extent, outpatient services. Of equal significance, the flagship facility for most Igualas is located in the center of Santo Domingo and thus is removed from most low-income areas. Although not located in peripheral areas, the main facilities for SML and PRIMAG are situated on access routes to some low-income barrios. Only SDS and ADSME maintain an extensive selection of providers located throughout the metropolitan area.

2.3 ENROLLEES

Most enrollees are employees of established, small and mid-size companies or state-affiliated, semi-autonomous corporations. It appears that the largest and more prestigious firms are covered by ALICO and other indemnity carriers.

Further, companies with a large proportion of executives and educated, middle-class employees who can afford the higher premiums tend to prefer the more prestigious indemnity insurance plans. These plans permit the enrollee considerable freedom of choice regarding providers. Nevertheless, differences between network-type Igualas and indemnity insurance companies are increasingly blurred as the latter seek to restrict provider lists and incorporate managed care approaches into their insurance policies.

Most Iguala enrollees are low-income workers earning minimum wage (RD $500 in the public sector, $700 in the private sector) or above.[2] Some Igualas presented data demonstrating that two-thirds to three-quarters of enrollees make between RD $500 and $1,200. Depending on the collective agreements between a firm and its workers, employers cover between 50 and 100 percent of the monthly premium for the employee and his dependents. The remainder is deducted from the employee's salary. The Igualas report that most companies pay 75 percent of the cost of the premium for minimum wage workers. State-affiliated corporations generally cover 100 percent. Without the large employer contribution, few employees could afford the monthly premiums for their entire family.

2.4 BENEFITS: OUTPATIENT SERVICES

Exhibit 7 presents a matrix containing most outpatient services covered by the basic plans for low-income Iguala enrollees. These plans offer the same range of services as the basic plans. However, price limits (per bed-day) or copayments (for diagnostic services) have been modified to reduce out-of-pocket expenses. Except for preventive care, the Igualas offer

[2] In 1989, CIECA - Centro de Investigación Económica - determined that RD $733 was the minimum annual income needed to permit a family of five to avoid a situation of "extreme poverty." (Isla, 1990).

EXHIBIT 7

BENEFITS SUMMARY: SELECTED OUTPATIENT SERVICES (a)

OUTPATIENT SERVICES	ADSME	GMA	GMC	PRIMAG	SDS	SEMMA	SIMAG	SML	ALICO (indemnity insur.)
MAX. NO. OF VISITS P/YR (W/O CHARGE)	15	12	12	15	15 ($5 copay.)	12	15 ($5 copay.)	unlimited	12
MEDICINES	not covered	not covered	not covered	not covered	not covered	not covered	not covered	not covered	not covered
EMERGENCY ROOM (b)	FC	FC	$75 p/visit ceiling	FC	FC	FC	FC	$600/yr ceiling for consumables	$150 ceiling p/case
DIAGNOSTIC SERVICES (c)									
LABORATORY	$400/yr ceiling	routine: FC others:50% copay	$500/yr ceiling for laboratory and x-ray	$400/yr ceiling	$500/yr ceiling (w/ 20% copay.) for laboratory and x-ray	routine: FC others:50% copay.	FC except for complex tests	$1,000 p/yr ceiling for all diagnostic tests	unless specified, 5% copay. for all diagnostic tests (no ceilings)
X-RAY	$400/yr ceiling	" "		$400/yr ceiling		" "	" "		
SONOGRAPHY	50% copay.	50% copay.	50% copay.	50% copay.	50% copay.	50% copay.	50% copay.	" "	maternity plan (e)
EKG	FC	FC	FC	FC	20% copay.	50% copay.	FC	" "	
ENDOSCOPY	FC	FC	FC	50% copay.	50% copay.	50% copay.	FC	" "	
TOMOGRAPHY	25% copay.	not covered	50% copay.	50% copay.	50% copay.	50% copay.	50% copay.	" "	
DENTAL CARE	basic serv.: FC other: 70% copay.	not covered	not covered	not covered	not covered	not covered	not covered	not covered	not covered
PREVENTIVE SERVICES									
ROUTINE CHECKUP	covered w/i 15 visit limit	covered w/i 12 visit limit	covered w/i 12 visit limit	covered w/i 15 visit limit	covered w/i 15 visit limit	not covered	not covered	FC	not covered
WELL-BABY	" "	" "	" "	" "	FC	covered w/i 12 visit limit	covered w/i 15 visit limit	FC	covered w/i 12 visit limit
IMMUNIZATIONS (d)	FC incl. polio & DPT vaccines	FC if included in office visit	FC if included in office visit	FC if included in office visit	FC incl. polio & DPT vaccines	FC if included in office visit	FC if included in office visit	FC if included in office visit	not covered
PRENATAL/POSTNATAL	FC	FC	FC	FC	FC	FC	covered w/i 15 visit limit	FC	covered within maternity plan (e)
PAP SMEARS (checkup)	covered w/i $400/ ceiling	not covered	covered w/i $500 ceiling	covered w/i $400 ceiling	FC	FC	FC	covered w/i $100 ceiling	FC: if referred
FAMILY PLANNING	sterilization/IUD	not covered	IUD insertion	sterilization	not covered	not covered	IUD insertion	sterilization/IU	not covered
YEARLY EYE EXAM	FC	FC	FC	FC	FC	FC	FC	FC	not covered

Note: money figures in RD pesos: RD $7.28 = U.S. $1 (7/90).
FC means FULL COVERAGE (no restrictions and no charge).

Notes for Exhibit 7

(a) Refer to basic plans for low-income employees. (b) Includes physician services, medicines and consumables.
Copayments are applied to discounted prices.
(C) Patients must use specific facilities contracted by the Iguala.
(d) Application only. Unless noted, vaccines are not covered. (e) Plan has RD $2,000 ceiling for all maternity-related services.

comprehensive coverage of outpatient services. Generally, there is little variation regarding the range of covered services. The differences rest in the price ceilings and copayments stipulated for each service.

Most Igualas limit outpatient visits to 12 or 15 per year. SDS and SIMAG require copayments (RD $5) per visit. Only SML, which employs its physicians and operates a family practice/referral system, allows unlimited outpatient consultations. Emergency visits are fully covered by all Igualas and usually are not restricted to a particular facility. In all cases, outpatient medicines are not covered. The major differences among the Igualas are in coverage of diagnostic services. PRIMAG, ADSME, GMC, and SML have established yearly price ceilings for laboratory and x-ray exams ranging from RD $400 to $500. SML allows a RD $1,000 ceiling which covers both categories. Considering that most routine lab exams cost no less than RD $25 and more sophisticated tests cost more than RD $100 (such as T4, IgA, phosphatase, x-rays with contrast media, etc.), the limits appear restrictive. Nevertheless, it is difficult to assess out-of-pocket expenditures because charges depend on contracts which the Igualas have negotiated with storefront and hospital-based labs and radiotherapy units. Patients must utilize these providers only. Any copayment or price ceiling listed in Exhibit 7 corresponds to the discounted charges secured by the Iguala. Full charges may be 20 to 30 percent higher than the Iguala-negotiated prices.

Several Igualas cover 100 percent of the cost of routine tests and 50 percent of more costly complex tests. SDS applies a yearly maximum for diagnostic services but requires that patients pay a 20 percent copayment (of the discounted price) for each test. After surpassing the price ceiling ($500 for laboratory tests and x-ray exams), the patient must pay 100 percent of the discounted charge. For most Igualas, special diagnostic tests such as sonography, electrocardiography, tomography, etc. usually require a 50 percent

patient contribution. SML includes these tests under the RD $1,000 ceiling which is applied to all diagnostic services. Only ADSME covers dental care (prophylaxis, diagnostic, and routine restorative care).

Significantly, the Igualas cover few preventive, promotional, and family planning services and none have organized programs. In most cases, preventive services are provided on demand only, and usually by specialists. Well-baby visits, vaccinations, and physical checkups are considered equivalent to regular morbidity consultations and are thus charged to an enrollee's allotment of outpatient visits. Patients must also pay for the vaccines. However, most plans allow additional outpatient visits for pre-natal care at no charge. Half of the sampled Igualas cover a yearly PAP smear which is not charged to the patient's diagnostic test account. The remainder cover the test within the yearly diagnostic service payment ceiling. A few Igualas cover female sterilization (usually post-cesarian) and IUD insertion. Other family planning services are conspicuously absent from the plans, in part because participating providers do not offer these services. Most cover a yearly eye exam.

2.5 BENEFITS: INPATIENT SERVICES

Exhibit 8 displays a matrix of inpatient services covered by the sampled Igualas. Again there is little difference among the Igualas regarding the range of services covered. Differences relate to payment limits or ceilings and copayments. As mentioned, it is difficult to assess out-of-pocket expenditures because of the heavily discounted charges negotiated between the Igualas and their providers regarding each service type. In fact, most Iguala patients are unaware of out-of-pocket expenses until they are discharged from the hospital.

EXHIBIT 8

EXHIBIT 8

BENEFITS SUMMARY: INPATIENT SERVICES

INPATIENT SERVICES	ADSME	GMA	GMC	PRIMAG	SDS	SEMMA	SIMAG	SML	ALICO (indemnity insur.)
MAX. NO. OF BED-DAYS P/YEAR	31	60	30	$3000 p/case ceiling	unlimited	5 per case	45 $300 deductible (p/case)	unlimited	31 p/case
SPECIALIST CARE/ CONSULTATIONS	FC	FC	FC	FC	FC	FC	FC	FC	$1300 ceiling deduct. & 20% copay. above $1300
USE OF OPERATING ROOM	$250 ceiling p/case	FC	$2,000 ceiling (surgery) $1,500 ceiling (int. med.)	covered w/i $3000 ceiling	FC	FC except for "complex" surgeries	FC	FC	$1000 ceiling applied to all services: deduct. & 20% copay.
ANESTHESIA	FC	FC	includes all hospital care	" "	FC	FC	$1000 ceiling p/case	FC	above $1000
MEDICINES	$600 ceiling p/case	FC except for complex chemotherapies	" "	" "	$100 p/bed-day 50% copay. above $100 max.	FC	" "	$500 p/yr ceiling	" "
DIAGNOSTIC SERVICES									
LABORATORY	$400 p/yr. ceiling	routine: FC complex: 50% copayment	" "	" "	FC	routine: FC complex: 50% copay.	FC	$1000 p/yr ceiling for all tests	" "
X-RAY	$400 p/yr. ceiling	" "	" "	" "	FC	" "	FC	" "	" "
INTENSIVE CARE (a)	$90 p/day ceiling	FC	max.: 3 days $400 p/day ceiling	" "	FC except for physician fees	3-day max.	5-day max.	FC	" "
MATERNITY/NEW BORN CARE	FC	FC	$2,000 ceiling	FC	FC	FC	FC	FC	$2500 ceiling (normal birth) deduct. & 20% copay. above $1000

Note: all money figures in RD pesos: RD $7.28 = U.S. $1 (7/90).
FC means FULLY COVERED (no restrictions or copayments).

(a) Unless noted, refers to consumables. Physician honoraria are usually fully covered.

As will be explained later in this report, the Igualas generally do not present all of the specifics on coverage, restrictions, and copayments in their promotional literature. Consequently, differences (in terms of copayments) are probably not as great as they appear. PRIMAG, SDS, and SML allow unlimited hospital days per year in semi-private rooms of two to four beds. The remaining Igualas have set a maximum number of bed-days ranging from 30 to 60. In general, the limits on the number of bed-days are not restrictive. Physician services and surgery are fully covered by most Igualas. SEMMA requires a percent copayment for "expensive" surgeries while SIMAG applies a RD $300 deductible for all hospitalizations. The Igualas vary considerably regarding the coverage formulas for medicines, anesthesia, and consumables. GMA and SEMMA provide full coverage without ceilings or copayments. The remaining Igualas cover anesthesia but have set per-case or yearly ceilings for medicines and consumables. SDS has set a RD $100 per day ceiling and requires a 50 percent copayment for any charges in excess of that amount. GMC and PRIMAG have established per-case ceilings that cover medicines, consumables, and diagnostic tests. As was the case for outpatient services, most Igualas set yearly payment ceilings for diagnostic tests or cover a percentage of charges depending on the type of test. Maternity services have few restrictions and are generally fully covered. ADSME, GMC, and SEMMA set payment or day limits for intensive care.

2.6 PREMIUMS AND FEE SCHEDULES

Exhibit 9 shows the fee schedules for selected physician and hospital services together with total monthly premium payments. With the exception of SEMMA, the premiums vary between RD $35 and RD $60 per person, per month. Although SDS charges RD $78 per person, the family premium of RD $200 corresponds to RD $40 per member for a family of five. Generally, employers pay from 50 to 100 percent of the premium cost.

As suggested above, the variation in prices appears more closely associated with variation in fee and payment schedules than with differences in benefits. For example, SEMMA and PRIMAG, the lowest-cost Igualas, also pay the lowest for hospital room rates (RD $75 and RD $90 per day respectively) and for physician fees. (As noted earlier, the same facility provides services for both

EXHIBIT 9

MONTHLY PREMIUMS AND PAYMENT SCHEDULES (FOR SELECTED SERVICES)

PAYMENTS	ADSME	GMA	GMC	PRIMAG	SDS	SEMMA (e)	SIMAG	SML	ALICO (indemnity insur.)
TOTAL MONTHLY PREMIUM (a)	$35 p/p	$35 P/P	$40 p/p	$34 p/p	$78 p/p $200/fam. of less than 6 members	$12 p/p	$45 p/p	$60 p/p	$68 p/p (includes life insurance policy)
MAX. BED-DAY RATE (b)	$45-$150 (c) (avg.: $90)	$85	$155	$90	$90-$125 (c)	$75	$160	no max. rate (f)	$100
PHYSICIAN HONORARIA									
OUTPATIENT VISIT	$30	$30	$20	$10	$20-$30 (c) plus $5 copay.	$15 (specialists)	$25 + $5 copay.	$25 (specialists)	$35
INPATIENT VISIT (d)	$75	$30	$50 for 1st day $25 after 3rd day	$20 for 1st day $15 p/addit. day	$40-50	$25 (specialists)	$25	$40 (specialists)	$35
NORMAL BIRTH	$200-$1000 (c)	$330	$400	$200	$800-$1300 (c)	$250	$600	$800	$2130 (g) (plus $370 copay.)
C-SECTION	$350-$1200 (c)	$175	$500	$300	$600-$1200 (c)	$250	$500	$1000	$3330 (g) (plus 670 copay.)
INQUINAL HERNIA	$200-$900 (c)	$350	$500	$250	$600-$1200 (c)	$350	$550	$800	$1696 (g) (plus $303 copay.)
APPENDECTOMY	$300-$900 (c)	$225	$400	$250	$500-$900 (c)	$250	$500	$800	$2520 (g) (plus $470 copay.)

Note: All figures in RD pesos: RD $7.28 = U.S. $1 (7/90).

(a) Refer to benefits listed in Exhibits 7 and 8. Premium rates from 7/70.
(b) Semi-private rooms of two to four beds.
(c) Rate depends on Iguala's assessment of facility's "quality," location, and full charges.
(d) Per-day rate for Internal medicine patients. Surgeons are paid according to the procedure.
(e) Iguala pays hospital fixed premium on capitated basis. Physician fees are established by the hospital.
(f) All rooms are private in SML facility and have same rate.
(g) Figures correspond to maximum fees paid to physicians practicing in "higher quality" center city facilities. Doctors practicing in peripheral hospitals receive 30 to 50% less.

PRIMAG and SEMMA.) Further, the honoraria for outpatient visits are less than one-half the fees paid by most other Igualas. Payments for surgical procedures are also considerably lower. SDS and SML have the highest physician fee schedule among the Igualas sampled, predictably they also have the highest premiums.

Most Igualas pay physicians between RD $25 and RD $35 per outpatient visit. These amounts are significantly lower than full charges which range from RD $45 to RD $75. The same holds true for honoraria for surgical and other services. Both ADSME and SDS have a sliding scale of payment depending on the quality and location of the facility. For example, SDS pays RD $125 per bed-day for "first-flight" hospitals but RD $90 per day for "second-flight" hospitals. The same holds for honoraria for physicians practicing in these facilities. For example, depending on the ranking of the hospital, SDS pays the physician between RD $800 and RD $1300 for a normal birth.

2.7 COST CONTAINMENT

While containment of rising costs is important, the procedures available for control of costs still are not very effective. Four types of cost containment procedures were found in the Igualas: discounted rates, utilization control, quality control, and actuarial rating. These procedures are discussed in this section.

2.7.1. Discounted Rates

As suggested above, variations in copayments, payment ceilings, and premiums appear to depend on special contracts as well as on ownership and other linkages between Igualas and providers, and to a lesser extent, on the former's control over medical care organization.

Igualas that are mainly affiliated with a single hospital facility (and the facility's diagnostic units) are able to offer lower premiums and fewer out-of-pocket expenses. To be sure, the majority of the patients who utilize the flagship facility are insured by the Iguala. Bed-day rates, charges for diagnostic services and other types of care are usually set by the Iguala and facility owners, which in most cases are the same individuals. Rates are set at minimal levels; allowing the hospital to (barely) meet operational expenses. The effect of this policy on facility upkeep and capital reserves is discussed later. These Igualas generally pay lower fees to the physicians but guarantee a large

volume, and in the case of ownership by participating physicians (GMA and SIMAG), a yearly distribution. SDS has a higher fee schedule and this responds in part to its direct-contract model. However, SDS is also seeking to insure higher-income employees and sees itself in direct competition with the indemnity carriers. By paying higher fees, it has attracted a number of "prestige" physicians who do not accept enrollees from other Igualas.

There is a certain tension between the Igualas and the participating physicians. The physicians consider the Iguala enrollees both their curse and their salvation. In other words, they resent the low fees they receive for services rendered to the enrollees yet realize that most Dominicans cannot afford to pay full charges. There is a tendency among participating physicians in center city facilities to price discriminate. That is, they provide cursory treatment to the Iguala patients (known as Igualados) or make them wait until the physicians have attended to their full-pay private patients. One Iguala owner related that recently an on-call specialist refused to return to the hospital to treat an emergency case because the patient was an Igualado. Many physicians perceive that the Igualas are making huge profits for their owners. This is especially thought to be the case when a single family owns and operates both the Iguala and the flagship facility. However, as mentioned earlier, although financially sustainable, most Igualas are not (nor are designed to be) lucrative businesses.

Of equal concern, some physicians are charging fees to the Igualados despite the stipulation in the plans that no copayment is required. In response to the physician-initiated charges, many Igualas are requiring participating physicians to sign contracts stipulating that surcharges cannot be collected from enrollees. Violation of the agreement will result in removal of the physician from the Igualas' provider list. Interestingly, ALICO has formed a consortium with two other indemnity companies and is presently drawing up a similar contract to be issued to all providers. In effect, these companies are creating a Preferred Provider Network (PPO). As in the case of the network-type Igualas, the agreement requires the physicians to accept the companies' fees as full payment and prohibits any surcharge. Executives of the insurance companies estimate that one-fourth of the providers will refuse to sign. In this case, enrollees will be warned that they risk out-of-pocket expenses if they seek services from "non-preferred" physicians.

2.7.2. Utilization Control

Utilization control by the Igualas remains at a developmental stage. The Igualas have not gained control over a comprehensive system that includes preventive care, referrals, and hospitalization that guarantees effective and efficient care. Most do not have the information management systems that permit analysis of detailed financial, utilization, and demographic data. Yet, in response to inflation, some Igualas have strengthened their informational and cost-containment capabilities. GMA and SIMAG have installed computerized systems that track claims, notify the firm when a patient has reached a payment ceiling, and to a lesser extent, provide utilization data. SDS and ADSME are in the process of installing similar systems. Presently, utilization control measures focus on inpatient services and generally involve several mechanisms.

First, medical supervisors have been hired to review hospital admissions and lengths of stay. In effect, these supervisors confirm the validity of hospital- and physician-submitted claims. In the past, the Igualas assert, providers frequently submitted fraudulent claims for services not rendered or substituted for others. Supervisors visit inpatients to investigate medical records and confirm the validity of the services delivered and supplies and drugs consumed. The supervisors' reports are later compared to claims submitted by the providers. Iguala executives maintain that this practice has resulted in enormous savings. However, perhaps because of limited management information capabilities, no Igualas perform retrospective utilization reviews or analysis of the use of ancillary services.

Second, many Igualas require that their medical supervisors pre-authorize hospital admissions, elective surgeries, and expensive diagnostic tests. In some cases, a second opinion is required for certain surgeries. Similar to many U.S. HMOs, the Igualas have yet to execute controls over outpatient physician and ancillary services.

Some Igualas, such as PRIMAG and SML, have sought to directly control utilization through the organization of medical care delivery. Since Iguala-operated facilities receive a capitated amount, they are at risk for overutilization. The principal feature of these Igualas is a referral system in which enrollees are assigned to salaried primary care physicians. All referrals must be made by these physicians. Prescriptions for expensive tests and medicines are authorized by the medical director. Unlike the more physician-controlled Igualas, the Iguala directors (who are also the hospital medical

directors) understand that their goal is to keep costs down. For example, hospital admissions are pre-authorized and access to specialists is limited.

In addition to enacting referral systems, PRIMAG and SEMMA also pay very low fees to participating physicians (See Exhibit 9). (Both Igualas are affiliated with Hospital Alcántara & González. All physician fees are paid through the hospital.) Consequently, the staff tends to consist of young and foreign-born physicians who have yet to establish themselves privately.

Of special interest, whereas ALICO and other indemnity companies claim that low-income workers are their greatest risk in terms of utilization, the Igualas maintain that middle-class employees are their principal users. Two possible explanations come to mind. The differences may relate to variations in benefit limits. For example, the Igualas require more copayments for diagnostic services than indemnity insurance. These charges probably burden low-income users more than middle-income users, and may reduce the former group's utilization. The difference may also respond to the types and size of firms. ALICO caters to large, international firms with extensive employee pools. Most firms covered through Igualas are small and mid-size. Although data is unavailable, utilization rates may be lower for workers in these latter firms.[3]

2.7.3. Quality Control

Perhaps the weakest aspect of Iguala operations is quality control and assurance. This mirrors the general situation of medical care in the Dominican Republic. Since common standards such as treatment protocols are non-existent, and utilization reviews to assess the appropriateness of diagnoses and treatments are rarely performed, it is difficult to measure the quality of service provision. Poor quality medical care has been documented in the public medical sector (Lewis, Sulvetta, and La Forgia, 1990) and newspaper accounts have documented deficient practices in the private sector (Isla, 1990). Poor physician training in the medical schools and hospitals is a contributing factor. Iguala medical directors report that unnecessary operations and hospitalizations

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[3] Preliminary data from an ongoing study (supported by the Robert Wood Johnson Foundation) regarding the extension of health insurance to microbusinesses in the U.S. suggest that smaller groups represent less risk than previously considered. In fact, workers from microcompanies are no riskier than workers employed by large firms. (See Reference No.14)

as well as unjustified hospital stays and diagnostic tests are pervasive and costly problems. Yet, the Igualas have not enacted formal quality control mechanisms (such as peer review, case reviews, treatment protocols, etc.) and many appear unwilling to do so. Iguala owners fear that they will lose the more prestigious participating physicians. Generally, quality assurance is carried out on an irregular basis and usually in a personal manner by hospital medical directors and/or Iguala presidents. Many Igualas recognize the need to sensitize the physicians to the need to provide quality yet cost-effective care.

Because of the poor quality of private practice and the costly consequences, Latino Americano de Seguros abandoned its regular indemnity plan and founded a staff-model HMO (SML) to directly control medical practice and medical care organization. Weekly medical staff meetings are held to review severe and costly cases. Grand rounds to review inpatient cases are held daily.

Another factor limiting quality assurance involves the inability of most hospitals to maintain a capital reserve to upgrade plant and equipment. In theory, health insurance is seen as a mechanism to mobilize resources for the medical facilities (Mills, 1983). This function is not evident among most Igualas. This relates in part to the discounted charges negotiated by the Igualas, the high costs of credit, and poor (hospital) administrative practices. More disturbing is the lack of concern that most physicians display for the hospital as a medical care institution. We have seen that a "physician first" mentality has been a basic tenet of Iguala operations since their founding. For example, participating physicians who are owners of some Igualas seek to receive any and all year-end profits and often vote against any allocation to a capital reserve fund for the affiliated hospital. According to one Iguala executive, physicians view the hospitals as a "garage where they temporarily park their patients." Generally speaking, any increase in premiums is immediately passed on to the physicians, who incessantly pressure the Igualas for increases in fee schedules. The big losers are the institutions where rates rise more slowly. Hospital Alcántara & González retains a percentage of physician fees to cover maintenance and upkeep costs. Such practices have led to poor relations between the owner and the physicians, yet the facility is perhaps the best-maintained hospital in Santo Domingo. Despite lax quality control, the quality of care in most private facilities affiliated with the Igualas is superior to that in public hospitals.

2.7.4. Actuarial Rating

Finally, actuarial and underwriting techniques are generally not employed by the Igualas. Nor do their executives consider this a drawback. Through experience they have learned to assess risk potential based on company size, salary levels, and to a lesser extent, sex composition. Generally, the Igualas employ rating systems that are based on salary levels of enrollees. Apparently they pay little attention to age characteristics in part because most exclude individuals over 65 years of age. Workers who earn within a certain salary range are placed in a given benefit plan. Most Igualas offer three plans depending on salary levels: Plan A for low-income workers, Plan B for middle-income employees, and Plan C for high-income executives or professionals. The premium cost is the same for all plan enrollees. Thus risk is spread among all enrollees within the plan irrespective of company size or industry type. Nevertheless, in addition to spreading risk among a large group of enrollees (within a particular plan), the Iguala's liability is limited because of benefit limits, payment ceilings, copayments, discounted charges, and reduced fee schedules.

2.8 MARKETING AND PROSPECTS FOR EXPANSION

The deterioration of state and social security services together with a high-inflation economy have resulted in a boom for most Igualas. Many report significant increases in the number of enrollees since 1987. They currently are receiving more employer-based applications (for group plans) than they can administratively handle. Both low- and middle-income affiliates are increasing. Due to continual strikes, lack of supplies, and poor quality of care at state and social security facilities, workers have been pressuring their employers to enroll them in private prepayment plans. At the same time, because of inflation many middle-class Dominicans who have paid private practitioners on a fee-for-service basis can no longer afford to do so. Many physicians have more than doubled their fees since 1988. White collar workers and professionals are pressuring their employers for coverage or are seeking family plans through the Igualas. At least two Igualas, SML and SDS, are trying to capture an increasing share of the middle-class market through family plans.

Most Igualas pay little attention to marketing. Due to the high demand for coverage, some have closed their sales departments. Neither do the Igualas attempt to respond to consumer preferences or needs. Recall that the raison d'être of the Igualas is to provide a guaranteed volume of services to physicians. There is little service orientation toward the client. This

situation is typical of most businesses in the Dominican Republic. However, this is slowly changing as some Igualas are becoming more selective regarding both providers and enrollees. Moreover, another reason why the Igualas have yet to develop their marketing potential is the apparent lack of competition among them. Contracts are often obtained through political, friendship, and familial ties. Indeed, the brochures produced by the Igualas to explain the various plans, ranges of services, copayments, and payment ceilings are for the most part vague or difficult to comprehend. Inpatients are often unaware of copayments until they are discharged from the hospital, as mentioned earlier in this report.

Despite recent growth and lack of marketing, most Igualas are very interested in expansion. The president of the Asociación de Igualas Médicas claims that the sector can expand by 60 percent without major increases in physical plant. Some Igualas, such as GMA and SIMAG, are constrained by high occupancy rates in their flagship hospitals. However, it is the author's view that through greater utilization controls and more efficient medical care organization, these facilities could manage a greater volume. Most Iguala managers state that participating providers could handle more than double the current volume of enrollees.

PART II: EXTENSION OF SERVICES TO MICROENTERPRISES

As is the case elsewhere in Latin America, the growth of informal sector employment in the Dominican Republic during the 1980s outpaced growth of the larger employers or more formal sectors of the economy, especially in urban areas. In 1988, a USAID-financed study estimated that 145,000 microenterprises exist in the Dominican Republic employing 400,000 people, representing 20 percent of the country's economically active population (Management Systems, Inc. 1989). Sixty-five percent of these businesses are located in low-income areas of metropolitan Santo Domingo. These informal sector enterprises provide goods and services to the residents of these barrios at affordable prices. Examples include: furniture construction and repair, shoe and clothing manufacturing, candy and food confection and sales, metal works, electrical repair, etc. Nearly two-thirds of these microenterprises obtain limited credit from friends, family members, or neighbors. Recently, USAID and other international donors have supported the establishment of credit associations to provide small loans (at discounted interest rates), management and leadership training, investment consulting, and other services to microenterprises. Two such organizations,

ADEMI (Asociación para el Desarrollo de Microempresas) and ADOPEM (Asociación Dominicana para el Desarrollo de la Mujer) were identified as possessing extensive contacts and loan portfolios with microenterprises in low-income areas of Santo Domingo.[4] Executives and field personnel were interviewed and financial documents reviewed. We turn first to ADEMI.

ADEMI

Founded in 1983, ADEMI currently provides loans and services to 2,000 microenterprises in Santo Domingo. These firms employ approximately 10,000 workers and indirectly benefit an additional 40,000 dependents. Since its inception, ADEMI has lent over US $14 million to nearly 8,000 microenterprises. The average loan is approximately US $300 and ADEMI claims a low six percent loan delinquency rate and a high 99 percent payback rate. ADEMI lends to microenterprises who have between US $500 and $20,000 of working capital and/or assets. These businesses employ between one and 20 workers. Through loans and donations from USAID and other donors, ADEMI plans to increase its portfolio by five fold during the next five years.

ADEMI maintains a network of salaried "field promoters" who are assigned specific barrios. In addition to seeking out new businesses and providing loan application assistance, they also arrange for all loans (usually within 72 hours) and collect the monthly payments.

According to ADEMI "field promoters," interest in medical prepayment plans is high among microenterprise owners and employees. ADEMI itself is very interested in serving as a grouping and administrative mechanism whereby Iguala-based prepayment plans are extended to present and past loan recipients. In other words, from the Igualas' perspective, administration of a microenterprise insurance plan would be similar to a single employer group. Presently, owners and workers are not covered by either private or social security group health plans. In a 1988 survey of owners of microenterprises, ADEMI found 80 percent seek private medical care, usually from fee-for-service practitioners located in low-income areas. A recent newspaper series on private practice highlighted the fact

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[4] In addition to ADEMI, the World Bank provides other examples of group lending organizations such as MicroFund in the Philippines and Kupedes in Indonesia. Although they vary in size, purpose, and complexity, the number of group lending schemes is growing rapidly in developing countries. (See Reference No. 16)

that many clinics "abuse the poor" through overcharges and fraudulent practices, such as charging for diagnostic exams and treatments that were never performed. (Isla, 1990).

ADEMI executives claim that three-quarters of affiliated microenterprises can afford the premiums charged by most Igualas for a basic medical plan. Further, most employees earn above minimal salary. In other words, their (cash) earnings are equivalent to or higher than those of salaried workers in larger industries which are affiliated with prepayment plans.[5] ADEMI's executive director, Pedro Jiménez, stated that a monthly RD $35 or $40 per person premium would "be nothing" for many microenterprises. He suggested that a pilot program in Santo Domingo would "easily" enlist 10,000 owners, workers, and their families. ADEMI offered office space and their network of "promotores" to enlist firms and their employees as well as collect monthly premiums.

ADOPEM

Founded in 1982, ADOPEM provides loans and management training to 1,500 microenterprises owned and operated by women in Santo Domingo. ADOPEM estimates that loans benefit nearly 11,500 employees and 46,000 dependents. Loans range from US $50 to $150. Most clients are small groups of one to three women, usually vendors of foodstuffs and clothing. To qualify for a loan, a business must have at least six months of experience. No minimal amount of working capital is required. As suggested by the low value of the loans, all ADOPEM loan recipients are "subsistence" type microenterprises. These businesses cannot afford the typical Iguala premium. (ADEMI points out that approximately 30 percent of their loan recipients cannot afford to pay Iguala premiums.) ADOPEM, however, recognizes the need for some type of health care coverage. Executives claim that health problems are the main reason for loan defaults among the association's borrowers. They recommend a reduced benefit plan that would cost RD $20-40 per month per family but at the same time would emphasize preventive, promotional, and mother-infant care. ADOPEM also has offered to manage the plan and collect premium payments. Interestingly, they prefer that the organization pay the premiums on a yearly or semi-yearly basis for all enrollees. The premiums would be added to the principal of each microenterprise's loan, thus increasing the monthly payments accordingly.

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[5] ADEMI maintains a current data base on the financial and income status and employee salaries of all loan recipients. The author selected a random sample of firms to confirm the profit levels, income, and salaries.

3.0 PROPOSED EXTENSION MODELS

The Igualas offer a comprehensive package of benefits that protects low- and middle-income families from the financial risks associated with medical expenses. They offer a range of services that are similar to indemnity insurance, but for approximately one half the cost. The lower costs are obtained through low fee schedules and heavily discounted rates for hospital and ancillary services. Utilization limits, payment ceilings, and copayments are common to Iguala plans and also help to defray costs. Yet these restrictions do not appear to constrain utilization based on need. They may, however, inhibit excess utilization. Lack of preventive care is a major gap in the Iguala benefit package.

ADEMI and ADOPEM offer the appropriate grouping mechanism that would create a sufficiently large risk pool to attract the Igualas' interest. Indeed, most Iguala executives responded favorably to the suggestion of extending coverage to a collective of microenterprise owners and employees managed by ADEMI and ADOPEM. Both organizations are willing to accept contractual responsibility for (and the risk of) fee collection and premium payments to the Igualas. The Igualas will accept the risk of providing services and controlling costs and utilization. Because of loans and other services provided to the microenterprises, both ADEMI and ADOPEM have sufficient contact with and leverage over these firms. Nevertheless, both associations will require technical assistance to set up and manage the risk pool.

Without the grouping mechanism no Iguala would attempt to market its plans to individual microbusinesses. We recall from an earlier discussion that most Igualas seek to eliminate even small businesses of fewer than 50 employees from their plans. Without the economies of scale, financial risk margin, and spread of health risk inherent to a large volume of enrollees, no Iguala would seek to extend coverage to individual companies. This is especially the case for a microenterprise risk pool. Since this group has never received coverage, it is difficult to estimate utilization rates without a survey of potential enrollees (described below).

Based on existing formulas, three extension models are possible:

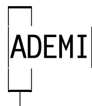
- Market Price Extension Option
- Reduced Price Extension Option

- "Subsistence" Extension Option

Each design combines elements of existing Iguala models (described earlier) with the organizational arrangements and benefit plans recommended by ADEMI and ADOPEM representatives. All estimated premiums are based on prices of June 1990.

The Market Price Extension Option refers to microenterprises--affiliated with ADEMI--which desire and can afford Iguala premiums (see Exhibit 10). Through a bidding process, ADEMI negotiates contracts with one or more Igualas in which benefits, premium levels, and provider networks are specified. Igualas with limited providers would have to secure additional facilities near the residences of the new enrollees. Contrarily, network-type Igualas such as ADSME would be at an advantage since they already have a large number of affiliated facilities and participating physicians. For a minimum volume of enrollees, the Igualas would grant at least a 10 percent discount on premium levels. These funds should remain with ADEMI to pay for administrative costs and to provide incentives to their "promoters" to collect premiums. In short, after an initial start-up investment, the project would become financially sustainable. In Exhibits 7 and 8, SDS and ADSME provide examples of the range of services and restrictions that can be proposed for this model.

EXHIBIT 10: MARKET PRICE EXTENSION OPTION
(estimated monthly premium: RD $40-50 per person)

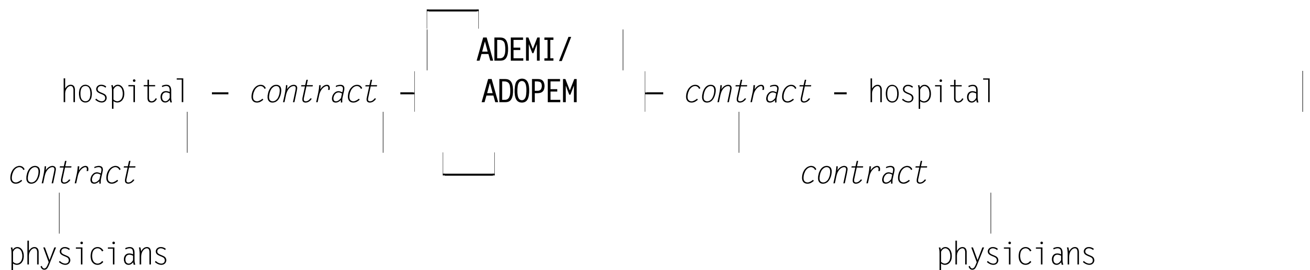


contract

The Reduced Price Extension option, illustrated in Exhibit 11, is a modification of the SEMMA design described earlier in the paper. This model could provide a similar package of services as the previous model at approximately half the cost. As in the case of SEMMA, ADEMI or ADOPEM would contract directly with a single facility. Through a bidding process, ADEMI or ADOPEM can assign a minimum number of enrollees to a facility. In effect, the plan would capitate the hospital and pay the premium based on the number enrolled. The facility itself would be at risk to provide the range of services for the premium stipulated in the contract. Consequently, only those facilities (such as Hospital Alcántara & González) with operational referral and utilization control systems together with low fee schedules would vie for this option. Expectedly, each facility would demand a large risk pool of at least 5,000 enrollees. A variant of this model would involve the establishing of linkages (i.e, referral system) between the main facility (or contractor) and outpatient clinics located in the barrios. Under hospital supervision, these clinics can serve as primary care centers providing basic curative, mother/infant, and preventive services. The hospital would provide specialist, diagnostic, and inpatient services for patients referred from the clinics. This model would require ADEMI or ADOPEM to institute an information system to track claims and utilization rates. In Exhibits 7 and 8, SEMMA provides an example of the range of services and restrictions that can be proposed for this model.

EXHIBIT 11: REDUCED PRICE EXTENSION OPTION

(estimated monthly premium: RD $20-30 per person)



The "Subsistence" Extension option, displayed in Exhibit 12, concentrates on the special needs of owners and employees of "subsistence" microenterprises who could not afford even the reduced premium of the previous design. This model

focuses on organized primary care programs in outpatient clinics located in low-income areas. Services would be limited to basic curative care, routine diagnostic tests, mother/infant care, essential medicines, and organized preventive and promotional services (including family planning). As mentioned above, ADOPEM favors this model for its borrowers. In addition to creating information systems on enrollees and utilization rates, this model would require that ADOPEM identify, assess, and select the participating providers.

EXHIBIT 12: "SUBSISTENCE" EXTENSION OPTION
(estimated monthly premium: RD $5-10 per person)

		outpatient clinics
ADOPEM	contract	paraprofessionals
		primary care physicians

3.1 RECOMMENDATIONS FOR USAID ASSISTANCE

USAID has an excellent opportunity to facilitate the extension of prepaid health services to a large pool of low-income workers and their families in the Dominican Republic. Specifically, the proposed project seeks to extend coverage to the working uninsured employed by microenterprises. Through technical assistance and funding to cover start-up costs, private prepayment plans could cover a potential target population of 100,000 (in Santo Domingo). Further, the proposed USAID/Santo Domingo extension effort will afford the Health and Population Division the opportunity to provide support to recipients of other USAID-funded projects, such as the microenterprises.[6] To be sure, the

[6] Due to time constraints, the extension of coverage to Free Zone workers was not explored. The Free Zones are also supported by USAID. Free Zone workers are only provided coverage for work-related accidents. This large pool of employees (and their dependents) represents an additional opportunity for coverage expansion through private prepayment plans. On a related note, the above-mentioned investigation funded by the Robert Wood Johnson Foundation is testing a number of models through which health coverage is being extended to owners and low-income employees of microcompanies in the U.S. According to a preliminary report, the results "debunk the commonly held theories that the small employer market (less than 10 employees) is too costly, risky, and

coordination among different USAID divisions to provide support to the same target group may present additional development assistance opportunities.

SESPAS services are generally ineffective and are deteriorating at a rapid pace.[7] Social security medical services are not much better, as evidenced by worker and union pressure on employers to seek additional coverage through Iguala-based plans. A private physician who operates a clinic in an impoverished barrio of Santo Domingo stated in an interview that "only the down-and-out seek medical care at SESPAS." She remarked that most residents cannot afford fee-for-service care but prefer to borrow money or sell possessions to pay a private practitioner rather than use SESPAS facilities. As suggested by an ADOPEM executive, a serious illness that befalls an owner or key employee can financially ruin a nascent microenterprise and result in a loan default.

As suggested earlier, the Igualas will not extend services to microenterprises without the existence of a grouping mechanism such as ADEMI or ADOPEM. The costs of marketing to this group on a per-firm basis (and collecting the premiums) are prohibitively expensive. Self-selection is another reason why the Igualas would not sell plans to individual microenterprises. In addition, Iguala executives have expressed concern about the ability of ADEMI or ADOPEM to promote and administer the plan as well as collect premiums from their affiliates. Most have little knowledge of these associations. Others state that if USAID provides assistance to these associations in terms of training, information systems, management, etc., to create and make operational the collective, they would readily seek to cover all or a portion of the enrollees. ADOPEM and ADEMI would also need some start-up funds for supplies, staff, and a personal computer. The collective would retain the discounted portion of the "full" premium to pay for administrative costs. Although it is difficult to forward a precise estimate, the operation could become financially sustainable after several months of premium collection. Nevertheless, the collective should maintain a special reserve to cover nonpayments and fluctuations in experience.

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administratively unwieldy for [private] insurers to manage and that insurers can't develop affordable packages attractive to small employers and their workers." Some of the models involve the formation of risk-sharing grouping mechanisms (Medical and Health Perspectives, 1990).

[7] This has been documented in a number of studies. See: Lewis, Sulvetta, and La Forgia (1990); La Forgia (1989), Duarte, Gómez, La Forgia, and Molina (1988), Whiteford (1987), and Gómez Ulloa (1985).

At the same time, USAID should provide other incentives to the Igualas that are interested in bidding for the microenterprise pool. The Igualas are aware that their days are numbered regarding current management practices. As medical costs escalate, they realize that they can no longer depend on reduced physician fees and discounted rates to keep premiums low. Ostensibly, quality of care will suffer. The Igualas' raison d'être, channeling patients to specialists, is slowly eroding as a basic tenet underlying Iguala operations. Technical assistance (TA) regarding quality assurance, utilization control, and management information systems is high on most Igualas' request lists. [8] Many wish to visit U.S.-based HMOs (at their own expense) to learn more about operations. Others seek TA on setting up ambulatory surgery units in participating hospitals. Few make requests for money. Nevertheless, all Igualas that are closely affiliated with a single hospital request that USAID "create opportunities" in terms of lines of credit to technologically upgrade equipment and plant.

Technical assistance will be needed to assist the Igualas in adding preventive and promotional services to their benefit package. We have seen that the Igualas cover few such services. This will not be an easy task since most services are specialist-based. The initiation of an organized preventive program, presumably staffed by paraprofessionals, will reduce patient volume for some physicians. As seen above, however, inflation is forcing Iguala executives to rethink the physician orientation on which the Igualas are based. They realize that preventive services are needed to keep the patients out of specialist offices and the hospital.[9]

Igualas affiliated with a single facility are in a better position to organize a primary/preventive health care program. Others should consider expanding their provider networks to include outpatient clinics in low-income

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[8] Types of technical assistance for the Igualas are described in depth elsewhere. See Schneider and Wolf, 1989.

[9] A 1986 study of a Brazilian HMO assessed the costs and benefits of incorporating family planning services into the benefit package (Junqueira Viera, 1986). The results demonstrated that family planning would return a favorable cost-benefit ratio within three years after implementation. The study estimated that family planning services would reduce the number of births by 6 percent, the number of abortion complications by 57 percent, and the cesarian rate by 10 percent.

areas to provide these services. Currently no Iguala is affiliated with an outpatient clinic located in an impoverished area. A primary health care program could be staffed by trained paraprofessionals with physician backup to reduce costs. Benefits can include: vaccinations, well-child visits (including growth monitoring), ORT, treatment of diarrhea, family planning, and health education. However, pre-natal care should remain physician-based. To remove prenatal care from the purview of the gynecologists, a powerful group within the medical corps, would create serious internal problems for most Igualas.

Before initiating any activity, better understanding is needed of the potential for adverse selection. In a voluntary plan the sick are more likely to enroll than the healthy. Since little information is available on demographic characteristics, economic levels, or utilization patterns of the potential enrollees, a survey will be needed to obtain this data. The data collected from potential members of the microenterprise risk pool (owners, employees, and their families) will be compared to data obtained from the actual enrollees to determine the presence of adverse selection. The information gathered through the survey will also provide information for determining the potential market for Iguala services, the appropriate expansion model, and the elements of the benefit package. Moreover, the survey can provide baseline utilization data to determine whether individuals, upon enrollment in a plan, dramatically increase their utilization patterns (which would indicate effects of moral hazard).

3.2 FUTURE COURSES OF ACTION

To prepare for the extension of Iguala coverage to uninsured, low-income families, USAID should plan for a pilot or demonstration project that includes an applied research component. This project should incorporate approximately 10,000 microenterprise enrollees (owners, employees, and dependents) into an insurance plan. The project will include an applied research study to test the economic and administrative viability, client satisfaction, and financial/health risk margin of at least two of the three proposed models. Within a particular plan, different benefit packages and cost-sharing arrangements can be tested on a demonstration basis. In short, the proposed project seeks to develop low-cost extension models through the creation of appropriate and well-managed risk-sharing pools, the design of acceptable benefit packages with cost-sharing provisions and service limits, and the efficient utilization of Iguala-based service delivery and administrative systems. Preparatory activities will include:

1. Assess the training, organizational, and budgetary requirements involved in establishing the ADEMI- and ADOPEM-based grouping mechanism for affiliated microenterprises. Set the terms of the contractual commitments between these associations and participating Igualas. Establish the criteria required for a microenterprise to participate in the health plan.

2. Assess the employers' and employees' needs and desires regarding health insurance coverage. What do they consider an acceptable minimum service package? Ascertain the premium costs that are affordable to different groups of microenterprises. What are workers willing to accept in terms of copayments and deductibles?

3. Conduct a survey of potential enrollees to determine utilization patterns and age, sex, and economic characteristics.

4. Meet with interested Igualas to discuss the possible benefit packages and costs. Collect and analyze any available Iguala-based data on utilization rates by salary levels and areas of residence.

5. Evaluate the specific technical assistance needs of the interested Igualas regarding cost containment methods. These can include: health care delivery and practice patterns, benefit package design, financial and utilization data requirements, rate setting capabilities, utilization control mechanisms, claims analysis, and quality assurance.

6. Assess the possible delivery mechanisms (and cost) of establishing the organized provision of preventive, promotional, and family planning services by providers affiliated with the Igualas.

7. Conduct a study to identify possible lines of credit for equipment and plant upgrading.

4.0 CONCLUSION

The Igualas Médicas offer a potential vehicle to extend health coverage to a large number of Dominican families presently receiving health care at deteriorating public facilities or through high-priced, fee-for-service practitioners. Based on a sample of eight Igualas, this report examined the strengths and weaknesses of these prepayment plans as extension mechanisms. In Santo Domingo the Igualas offer a comprehensive package of medical services to mainly low-income, salaried workers from a variety of industries. Through benefit limits, copayments, and heavily discounted provider fee schedules, the Igualas have kept premiums low while maintaining a comprehensive benefit package. Since their founding in the late 1960s and early 1970s, the Igualas have demonstrated impressive growth and increasing market share. This growth has occurred in the lower-end market of minimum wage employees in small and mid-size firms and government-affiliated agencies. Given the volatile, high-inflation Dominican economy, their ability to survive (and grow) is testimony to their experience and market acumen. Nevertheless, the Igualas' physician orientation, near absence of preventive care benefits, and limited quality and cost-containment arrangements may restrict their competitiveness and growth in the future.

This report also identified two associations of informal sector microenterprises which could serve as grouping mechanisms for these firms' owners, workers, and dependents. These associations maintain strong links to a large number of microenterprises that dot the low-income and impoverished areas of Santo Domingo. The institutional capacity of these organizations to initiate and manage a risk-sharing pool will require further investigation. Moreover, establishing the risk pool will require careful attention to the selection process to avoid adverse selection and to ensure group stability.

Interest is high among Iguala executives, microenterprise association officials, and microenterprise owners and employees to establish a private health insurance scheme. Through providing technical assistance to develop the institutional capacity of the microenterprise associations and to strengthen cost and quality control measures of the Igualas, USAID has an opportunity to foster the extension of health services on a sustainable basis to uninsured, low-income groups.

Finally, the proposed project addresses a number of broader issues concerning extending health coverage to the uninsured. Conventional wisdom

suggests that private health insurance best serves large, well-established firms and the middle classes in developing countries, and premium costs are considered too high for small firms and their workers. Further, private insurance extension efforts are often seen in terms of shifting those who can pay -- often middle-income workers -- away from free health ministry services. One question to which this project may provide an answer is whether certain groups of informal sector workers can be covered through private insurance schemes. Perhaps the key issue in this regard is the identification of appropriate grouping mechanisms to establish risk pools for uninsured workers. Are these grouping mechanisms maintainable over the long run? Another question is what type of benefit package (or range of services) is desired by and affordable to the workers and owners of microenterprises. Can such a package be offered through a private insurance scheme and delivered through private providers? What type of public or donor assistance will be needed to make such an initiative sustainable? The project will also provide the opportunity to examine the risk associated with insuring informal sector groups. Do microenterprise workers represent a higher risk than their insured counterparts in large firms?

GLOSSARY

ACTUARIAL TECHNIQUES: Statistical procedures usually based on age, sex, occupational group, utilization data, etc., used to calculate insurance risks and premiums.

ADVERSE SELECTION: Disproportionate enrollment in a plan of persons with adverse risks with a potential for higher health care utilization (such as older persons and the impaired).

BARRIO: quarter, suburb, neighborhood

CAPITATION: A method of payment and charging for health services in which an HMO or medical group is paid a fixed amount for each person served, usually on a monthly basis. This payment covers all services stipulated in the benefit package regardless of the actual value of those services.

COPAYMENT: Any extra out-of-pocket charge specified in a benefit package for certain services not fully covered through prepayment.

DEDUCTIBLE: The amount paid out-of-pocket by an insured person before the insurance starts paying.

HEALTH MAINTENANCE ORGANIZATION (HMO): An organized system of health care that provides directly or arranges for a predetermined package of health services to a voluntarily enrolled group of persons under a prepayment plan.

INDEMNITY INSURANCE: Insurance coverage in which insured persons are indemnified through reimbursement for incurred medical expenses.

INDEPENDENT PRACTICE ASSOCIATION (IPA): A less centrally organized HMO that contracts with solo practitioners in private practice. Generally, IPAs have large panels of physicians who may also see non-plan patients.

INFORMAL SECTOR: A subset of the economy in which the process of income generation is unregulated by government or legal institutions.

INPATIENT: A hospitalized person.

MANAGED CARE: Refers to prepayment plans that use an organized network of providers capable of modifying patient and provider behaviors to reduce unnecessary utilization and costs. Providers are usually financially accountable to the plan with respect to both costs and patient outcomes.

MORAL HAZARD: The tendency of persons, once insured, to increase the likelihood of risk (illness) which they are insured against. Also refers to unnecessary utilization.

OUTPATIENT: A patient who is provided services on an ambulatory basis.

OVERHEAD COSTS: Costs incurred outside of the direct delivery of services (administrative, laundry, cafeteria, etc.).

PREMIUM: The amount charged employers or individuals to prepay the cost of health services.

RISK MARGIN: The estimated amount of revenues and reserves needed to cover the uncertainty of financial loss due to higher than expected utilization and costs.

RISK POOL: A large group of persons established with the expressed purpose to apportion financial liabilities for medical services across all members.

STAFF-MODEL HMO: Participating physicians are salaried employees and provide services at the plan's ambulatory and hospital facilities.

TREATMENT PROTOCOL: Clinical norms that demonstrate accepted diagnostic and treatment procedures.

UNDERWRITING: The selection and rating of risks covered by an insurance policy and the determination of financial terms and conditions, such as premium rates, of an insurance policy.

ACRONYMS/ABBREVIATIONS

ADP: Asociación Dominicana de Profesores (Dominican Teachers' Union)

ADEMI: Asociación Dominicana para el Desarrollo de Microempresas (Dominican Association for Development of Microenterprises)

ADOPEM: Asociación Dominicana para el Desarrollo de la Mujer (Dominican Association for Women's Development)

ADSME: Administración de Servicios Médicos (Medical Services Administration)

ALICO: American Life Insurance Company

CIECA: Centro de Investigación Económica (Center for Economics Research)

GMA: Grupo Médico Asociado (Associated Medical Group)

GMC: Grupo Médico Centro (Central Medical Group)

HMO: Health Maintenance Organization (see Glossary)

IDSS: Instituto Dominicano de Seguro Social (Dominican Institute for Social Security)

ISSFAPOL: Instituto de Seguridad Social de las Fuerzas Armadas y la Policía Nacional (Social Security Insitute for the Armed Forces and the National Police)

PRIMAG: Plan de Igualas Médicas Alcántara & González

PVO: Private Voluntary Organization

SDS: Servicios Dominicanos de Salud (Dominican Health Services)

SEEBAC: Ministry of Education, Fine Arts and Culture

SEMMA: Seguro Médico Para Maestros (Medical Insurance for Teachers)

SESPAS: Secretaría de Estado de Salud Pública y Asistencia Social (State Secretariat for Public Health and Social Assistance)

SIMAG: Servicios de Igualas Médicas (Igualas Medical Services)

SML: Servicios Médicos Latinos (Latin Medical Services)

USAID: United States Agency for International Development

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