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**Primary Health Care in Practice: Is It
Effective?**

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Abstract

Primary health care is accepted as the model for delivering basic health care to low income populations in developing countries. Using El Salvador as a case study, the paper draws on three data sets and a qualitative survey to assess health care access and utilization across public and private sector options (including NGOs). Multivariate analysis is used to estimate the quantitative determinants of health seeking behavior. Physical and financial access is generally good. Households do not value the community health workers, and prefer high cost private care, even the poorest families, because of the lower waiting times and higher probability of successful treatment. Similarly, higher level public facilities—health centers and hospitals—are preferred because they are less costly in terms of time as they offer "one stop shopping" and do not require multiple visits, and treatment success is higher than among health posts, health units or community health workers. These results combined with the small size of El Salvador suggest that alternative strategies to community health workers may be a more cost effective approach. While prevention is desirable, community health workers do not have the skills or services that the communities value, which makes them less effective in promoting prevention. Alternative modes of reaching the community could reduce costs and raise the effectiveness of public health spending.

Primary Health Care in Practice: Is It Effective?¹

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Health care in much of the developing world has developed into two tier systems, a sophisticated and expensive hospital care system in urban areas, and a network of primary health care (PHC) clinics that complement the hospital system and offer basic, preventive services to low income families in both urban and rural areas. The latter concept gained widespread support following the Alma Ata Declaration of 1977 where an emphasis on prevention and basic care was put forward as an affordable and much needed approach to ensuring health care. It was widely embraced and PHC systems have proliferated across the developing world.

An implicit assumption of the model was that there was demand for preventive services among low income households, and that local institutions were capable of taking on the challenge and producing services for the population. With few exceptions, the assumption has rarely been seriously questioned, and research into PHC issues has focused on how to fine tune the approach without challenging the premise, or evaluating the viability or impact of the investment. Recent work by Hammer et. al. () and Das () have begun to address the dearth of research in the area.

In short, little attention has been devoted to whether the approach works to effectively deliver services, whether there is effective demand for such services, and whether health improvements result. Without such analysis it is difficult to assess whether the expenditures on public services is warranted, and whether the adopted model is the most effective means of reaching the target population. Moreover, the issue of the role, importance and relative effectiveness of private providers of primary care in rural and peri-urban settings (where the poor are concentrated) has received little serious work.

Understanding access -- physical, informational and financial -- and subsequent health seeking behavior allows an assessment of preferences. Utilization of existing public infrastructure measures effective demand, that is informed by a combination of access to information, access to supply and household preferences. Hence once access is determined, utilization patterns allow measuring demand both within the public system and across public and private options. From a public policy perspective, these issues are critical if resources are to be deployed efficiently and public supply calibrated to meet demand.

This paper begins to address some of these issues in the context of El Salvador, examining demand and institutional issues in the delivery of publicly financed and provided health care. Two basic questions are addressed. First, do consumers want PHC, whether or not there are other options and whether it is public or private. Second, what is the demand for primary health care given costs and quality?

The paper uses quantitative and qualitative information to analyze the issues underlying these policy issues. The next section summarizes the literature on PHC and its effectiveness, followed by a discussion of the data and methods. The third section provides the background on El Salvador and its health system, and the next two sections, respectively, discuss access, and revealed preferences of households across health care

service options; in doing so they exploring public and private roles and the options within the public system. The final section discusses the policy implications.

1. Literature Review of PHC

Despite declarations of the cost effectiveness of PHC the approach has received virtually no evaluation (Stanton and Wouters, 1992) of either costs or impacts. Opinions about the theory and purpose of PHC abound (e.g., Kloos, 1990), as do reports of primary care experiences. Indeed the literature is largely focused on fine tuning the approach (e.g., Bentley, 1989; Stone, 1992; Woelk, 1994; Zaidi, 1994), for instance by adjusting the package of services provided (Walsh and Warren, 1979, Rifkin and Gill, 1986; Walsh, 1988; World Bank, 1993).

A number of studies have examined the health promoter, or community health workers (CHW), the minimally trained health providers who serve rural communities with a package of “basic services”. Issues of training (Robinson and Larsen, 1990; Korte et.al., 1992), supervision (Gray et.al., 1990; Stock-Iwamoto and Rolf, 1993) and incentives facing these providers (Stock-Iwamoto and Rolf, 1993; Korte, 1993) are frequent topics in this literature. However, there is limited evidence of their effectiveness except where limitations in some aspect of the CHW program are identified (e.g., training or community participation). Gray et al.(1990) question the value of services “filtered” through village workers and show some disturbing results, but otherwise the literature merely assesses how programs could do better. The conclusions of these studies are somewhat contradictory regarding the effectiveness of health worker profiles, supervision, experience and functions. Part of the problem is the difficulty in measuring inputs and impacts, and part of this is due to limitations in terms of study objectives, methodology and data.

Missing from this rich literature is any question of whether PHC makes sense, whether it is having any impact, and whether this model of health care provision can meet its objectives. Mills and Drummond (1987) come closest in taking a critical look at the literature to determine whether governments are getting “value for money.” They conclude that there are few studies of the economics of PHC delivery, but suggest that nutrition, oral rehydration therapy and immunizations constitute “good buys.” Other studies identify impediments to be overcome beyond those mentioned above, such as bureaucracy (Sherraden and Wallace, 1992; Zaidi, 1994), nepotism and politics (Woelk, 1994). In all these efforts, however, PHC is implicitly assumed effective.

In sharp contrast to the PHC literature, a more recent set of studies has examined household behavior and decision making processes to evaluate whether public expenditures on primary health care have an impact at the household level. Some of the same measurement problems faced by the studies discussed above affect this household level research as well. Studies by Gertler and Van der Gaag (1990) for the Ivory Coast and Peru, and by Alderman and Gertler (1989) for Pakistan examine the effect of price on service utilization with time costs factored into overall costs. An important determinant of demand for health services in these studies is quality. Quality is captured in various

ways. Drug availability and number of staff were used as proxies for service quality in studies of PHC in Kenya (Mwabu et al., 1993), Ghana (Lavy and Germain, 1995), and Nigeria (Akin et al., 1995). However, the policy implications of these are not particularly helpful, particularly given the literature discussed above regarding the effectiveness of public sector staff. Lewis et al. (1991; 1996), in an examination of hospital costs and services in the Dominican Republic, suggest that staff numbers have little if anything to do with service quality.

Hence these studies, while useful in examining certain demand parameters, do not address the issue of how the service delivery system and its structure affect demand. Nor do any of the reviewed studies consider the role of household perceptions, which are important. Similarly, the institutional problems with (dis)incentives to delivery of quality health care are absent.

2. Data and Methodology

Three different information sources are combined in this study: (i) an annual national multipurpose survey (EHPM); (ii) focus group surveys in 23 rural villages with 351 women, and with men in ten villages² and interviews with health promoters and community leaders in these villages; and (iii) a survey of the 315 women participating in the focus groups.

The focus group and survey data from the 23 villages have corresponding weaknesses: fewer observations, sparse data on household socioeconomic status, and a less representative sample. Such data problems of large sample surveys, and of focus groups and small surveys are typical. Here the data sources are combined to draw on the strengths of these complementary data sources.

National Household Survey. This nationally representative survey of households, *Encuesta de Hogares de Propósitos Múltiples (EHPM)*, covers income, earnings, labor force, wealth, expenditures and selected behavioral factors. The 1994 third quarter survey includes 4,253 households. It has a module on health problems and health seeking behavior. The rural sample covers 1,759 households with an average of 5.1 individuals in each. Its weakness is its brevity on health and health services issues. In particular, the EHPM health service module contains nothing about supply and deployment of health promoters.

Focus Groups and Interviews. The objectives of the focus groups were to determine: consumers' defined needs and concerns, how services rendered by government and NGO health providers are perceived by beneficiaries, awareness of available health resource(s), deterrents to seeking particular services, motivation of patients to choose one facility over another, or one promoter over another. Women 15 years and older were selected in each community, with 10-15 women participating in

² La Hachadura, Palo Grande, Punta Remedios, Belen Guijat, San Miguel, San Antonio, Nombre de Dios, El Copalio, San Felipe, and Santa Anita.

each focus group; adult males who participated in separate focus groups were selected similarly.

The study also employs interviews with health promoters, whether public (MSPAS) or private (NGOs) that serve the sampled communities. Also, informal interviews with community leaders and teachers on community characteristics complemented the focus groups and provided context for exploring the role of health promoters in rural communities.

These interviews were meant to shed light on the following: (i) promoters' perceptions of health services needs in their community; (ii) their self-assessment of their ability to supply those services, given their training, and the support and supplies received from their employer (MSPAS or NGO); (iii) whether there is competition and/or an overlap of activities among NGOs and MSPAS promoters; (iv) promoter's views on the quantity and quality of services they provide to their communities; (v) promoters' views on skills and training being offered by their organization, and those required by their job; and (vi) the relationship between promoter effectiveness and their characteristics (i.e. salary, benefits, experience, training, promotion). Focus groups and interviews were recorded on video and/or audio³.

Focus Group Survey. To complement the focus group data, a survey on health seeking behavior among the 315 women attending was conducted to gain insights into the behavior of households in times of illness. The survey explored use of specific providers, including promoters, the costs and time involved in seeking care, the success of that process, etc., and subsequent behavior when the first provider's treatment was considered unsuccessful.

Sampling. Selection of villages for the focus groups/survey were randomly drawn from the list of villages covered by the EHPM survey, additional selections were made to include villages in underrepresented areas, and to ensure inclusion of villages with either no promoters or NGO promoters, according to existing information. The latter criterion sharply reduced the possible overlap with the EHPM data set. Of the selected 23 villages, 14 are included in the EHPM data set. Finally, due to the unreliability of MSPAS information on promoters, of the 14 villages only one later proved not to have a health promoter (MSPAS, 1995, 1995a).⁴ Figure 1.1 is a map indicating major urban centers and the location of the focus group cantons.

The selection of focus group sites was determined by: (i) selection of cantons from all 14 departments; (ii) random selection of village sites adjusted by stratified samples to ensure the appropriate prototype mix; (iii) according to prior information, a cross-section of promoter prototypes was selected: cantons with MSPAS promoters only; cantons with NGO promoters only; cantons with MSPAS and NGO promoters; and

³ Additional details and the survey instruments are contained in Annex 1 of the World Bank (1997).

⁴ Tables A-1.2 and A-1.3 in Annex 1 of World Bank (1997) details the 20 communities included in the final sample, and summarizes the public and NGO services available in the sampled communities.

cantons with no promoters at all; (iv) twenty focus groups from each of the departments represented by 1 or 2 cantons. Focus group participants were selected randomly (within the category of women who had used services recently), with twenty invitations delivered to women, typically mothers with small children, in perimeter of the village, with five women selected from each part of the village. In addition, 5-10 men were invited from the same areas.

Methodology. The study uses all three sets of data in examining the major themes of illness patterns, perceptions and knowledge of health care options, health seeking behavior, and treatment outcomes. The qualitative and quantitative nature of the data allow examination of these issues from different perspectives. The qualitative results build on the views of the participants in the 23 communities. These are referred to in subsequent sections that explore quantitative results with econometric analysis. The community interviews provide insights into the impressions of community leaders and the behaviors of the health promoters assigned to the sampled villages.

The focus group data and the EHPM provide a descriptive profile of the households, and are applied in analyzing, treatment choices and success. Regression analysis is used to control for a myriad of factors and to separate out the factors that contribute to effective health service demand and service treatment success.

3. Country Context

El Salvador ended a 12-year civil war in 1992. During the civil war, certain areas of the country were cut off from government control and services, and some were severely damaged. Since 1992, economic growth averaged around 6.5%, and 1994 GDP per capita was at \$1,360. While El Salvador has produced solid economic progress, social indicators are lagging. Population increases are around 2.2% per year, well above the 1.4% of countries at similar income levels; infant mortality is 42 per 1000 live births, and malnutrition of children under 5 is about 22%, all indicators of poor health and poverty. School enrollment at 79% of the school aged cohort is behind the 103% average for lower-middle income countries (WDR, 1996).

A recent analysis examining the use of basic services in rural El Salvador using the 1994 EHPM and a 1996 rural survey of 738 households points to poor educational attainment and school attendance, and identifies inadequate infrastructure among the rural poor as major constraints to economic growth and well-being (Castro-Leal and Mehra, 1996).⁵ Table 1 summarizes results from the EHPM for infrastructure access, specifically for piped water, modern sanitation and electricity. Rural areas and the poor are underserved for these three services. However, the discrepancies are greater between rural and urban than between poor and non-poor. Missing from this list, but key for rural populations, are roads. The lack of roads is partly a legacy of the deterioration and

⁵ The study also points to the lack of targeting in health care, given the cost structure of health care and the resulting need to concentrate services in densely populated areas. The issue is addressed later in this paper.

destruction of infrastructure during the civil war (infrastructure is in the worst condition in areas that experienced the most intense conflict, Castro-Leal and Mehra, 1996). These issues are addressed below from the perspective of the sampled rural communities.

**Table 1: Access to Public Services by Area of Residence, 1994
(percentage of households)**

Area of Residence	Access to Piped Water ^{a/}		Access to Modern Sanitation ^{b/}		Access to Electricity	
	Poor	Non-Poor	Poor	Non-Poor	Poor	Non-Poor
Rural	14	28	2	8	35	61
Other Urban	35	69	15	53	77	95
San Salvador	44	87	41	82	80	98
El Salvador	20	65	7	53	46	87

a/ Piped water is either inside or outside the home or piped to a common neighborhood faucet.

b/ Modern sanitation is private or shared toilet connected either to public sewerage or to a septic tank.

Source: EHPM (1994-III) from Castro Leal and Mehra (1996).

Socio-economic Characteristics of Sampled Rural Communities

The characteristics of the sampled communities are summarized in Table 2 for location, demographic data and employment. The vast majority of households are engaged in subsistence agriculture, with a few in trade, fishing or cattle raising, making any accurate estimate of income difficult. Hence a reported estimate is provided, but durable goods ownership and other indirect measures such as quality of housing (e.g., floor composition) are used to capture income averages and differences across the region. Women are largely housewives, with a range of responsibilities that leave little time for outside employment; a few engage in selling food, both raw and prepared. Family size suggests that households generally have four or five children on average, in keeping with the high fertility rates observed in rural areas.

Commensurate with other findings and with El Salvador's epidemiological profile, water taps are rare. About half of households have electricity -- in the EHPM it was 45%, and 50% have TV sets, and 90% have radios. Between access to electricity and TVs there is a strong correlation, but the data also show that some communities without electricity have TVs (and radios) as households use car batteries. The demand for these durables is clear, and coverage by radio is particularly impressive; virtually every household has one. Finally, fewer than 5% own a pick-up truck, and cars are even less common.

Table 2: Community Profile: Demographics, Location and Income

CANTON	POPULATION	AVERAGE HOUSEHOLD SIZE	DISTANCE TO SAN SALVADOR (km)	AVERAGE FAMILY INCOME (colones/ month)
LA HACHADURA	4,400	3	132	2,000.0
BELEN GUIJAT	1,675	5.0	90	550.0
SAN MIGUEL	2,360	5.0	97	400.0
PUNTA REMEDIOS	4,600	5.1	108	350.0
EL PINAR	800	5.3	88	500.0
POTRERO SULA	10,000	5.0	78	800.0
SN. ANTONIO	2,900	6.0	69	400.0
SN. ISIDRO LEMPA	4,000	13.0	48	1,000.0
SANTA ROSA				
PALO GRANDE	1,100	6.9	25	300.0
EL CAULOTE	1,200	6.0	33	500.0
LAS DELICIAS				
CANDELARIA	2,100	7.0	24	600.0
EL PIMENTAL	1,800	6.0	25	200.0
NOMBRE DE DIOS	2,800	7.0	105	1,200.0
CAROLINA				
EL TORTUGUERO	590	5.7	90	300.0
EL SOCORRO	180	6.0	150	300.0
SANTA ANITA	2,620	6.0	99	500.0
SAN JUAN DEL GOZO	1,200	6.0		300.0
EL PALON	3,500	7.0	105	500.0
SAN FELIPE	570	5.0	160	200.0
EL COPALIO	2,800	7.0	N/A.	650.0
AVERAGE	2,560	84.78		576.38

Source: Community Leader Interviews on Community Characteristics.

Note: In the study period, eight colones was about one US dollar.

For schooling, the maximum grade available in nine of the 23 sampled communities was 8th or 9th grade, between 4th and 7th in four, and in the remaining eight communities only 3 grades were available. With the exception of teachers, the average grade completed for the 315 women in the focus groups is 2.4, which is comparable to the 2.6 years reported in the rural EHPM sample.

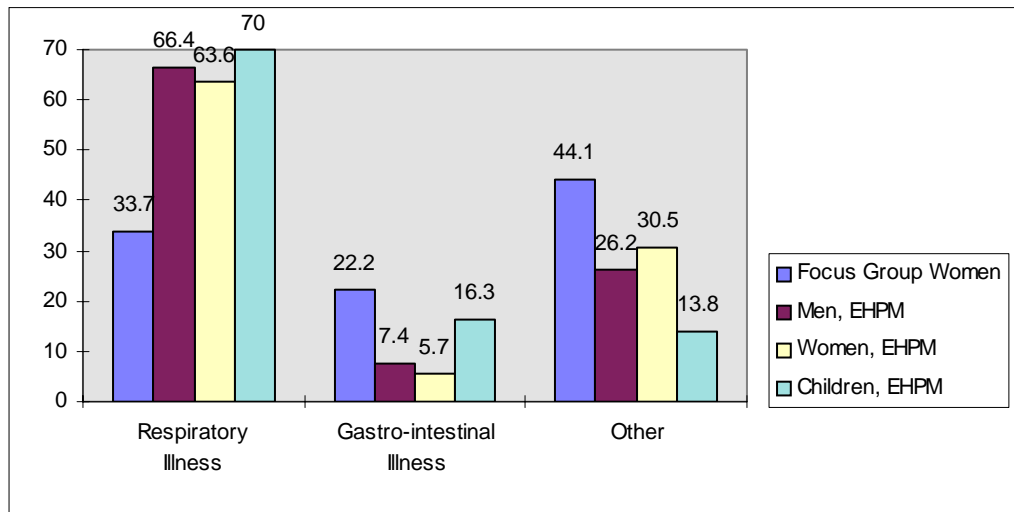
The data from the EHPM and the focus group survey suggest general comparability, with the biggest difference in home ownership (63% versus 84% reported by community leaders), and household size (5.1 and 6.2 reported by survey respondents). Some of this may be attributable to the fact that the EHPM used household interviews to collect the information, and the Focus Group sample relied on community leaders to estimate coverage and size. Moreover, the Focus Group sample started with mothers and was not necessarily representative of households, and is also a very small sample when compared to the EHPM.

Health Profile of Rural Communities

Figure 1 shows illness by cause in the two data sources used in this study: the village focus group survey and the rural subsample of EHPM. In the village focus group survey, responding women report on the latest illness in the household. In EHPM, the report is on all illness incidents in the household, with a 30 day recall period. In the

village focus group survey, the reported health problems are bronchitis, pneumonia, and asthma (15.2%) and cough (28.5%), totaling 33.7% of all illnesses. These illnesses can be viral or bacterial, with the latter treatable with antibiotics. However, income, lifestyle and education play a role, and susceptibility is likely to be associated with a set of factors in the home: cramped living conditions, trapped smoke from cooking fires, poor ventilation and dust from heaps of drying corn cobs. Acute respiratory infections (ARI) is responsible for about 65% of morbidity among children and adults (EHPM, 1994).

Figure 1
Distribution of Illness Incidence in Rural Households
from Focus Group Survey and EHPM



Note: Figures from the village focus group survey and the EHPM rural subsample are not strictly comparable given differences in sample and the phrasing of questions

Diarrhea was reported by 13% of the women surveyed, and stomach ache and vomiting by 9.3%, gastrointestinal symptoms constituted 22.2% of illness cases, mostly among young children and women. Women commonly suffer from what could be stress-related problems such as ulcers, colitis, gastrointestinal diseases and headaches. The health problems reported for children (largely upper respiratory infections and diarrhea) are directly related to living conditions: inadequately ventilated rooms, poor water supply, hygiene and sanitation (Focus Group Survey).

In the rural subsample of the EHPM survey, respondents are asked about illness episodes of individuals in the household over the last 30 days. Figure 3 shows that the overwhelming majority of these incidences are due to respiratory ailments. For men, women and children alike, about two thirds of illness episodes were due to respiratory problems. Stomach related disorders are also of importance, causing 16 percent of illness episodes for children, and six to seven percent for women and men. For gastro-intestinal illness, children are ill more than *twice* as frequently as adults.

Salvadoran Health Sector. The comprehensive study of the health sector, *Análisis del Sector Salud de El Salvador* (“Analysis of the Health Sector in El Salvador” or ANSAL) contains a thorough assessment of the health sector, and examines various aspects of it in some depth.⁶ As part of that effort, Bitran (1990) and Gómez (1989) studied the demand for health services analyzing expenditures and patient health-seeking behavior.

The ANSAL findings suggest that El Salvador is recovering from roughly 15 years of neglect of its health system. The country presents a complex epidemiological profile, and has an inefficient health care delivery and financing system. Epidemiologically, upper respiratory infections (URI), diarrhea, and malnutrition figure prominently, especially in the low income rural areas that encompass about two-thirds of the population. At the same time, the growth in behaviorally-based diseases of adults is accelerating in urban centers. The country has also had to cope with recent epidemics of cholera and dengue. Public capacity is weak and both systemic and disease-specific programs have suffered as a result. One notable bright spot is immunizations, where coverage is high by Latin American standards.

Health care is provided through the Ministry of Health and Social Assistance (MSPAS), the Salvadoran Social Security Institute (ISSS) and the private sector, which includes NGOs. Public expenditures account for less than half of all health spending. The network of MSPAS facilities constitute close to two-thirds of the sector’s facilities, and technically serves the entire population. ISSS services are accessible to those covered by social security, roughly 15 percent of the population. The private sector is very active, with a good proportion of basic, rural care provided through NGOs.

The private sector is growing in El Salvador. Private physicians and clinics are flourishing in the cities and major towns, and health insurance, currently covering about 2% of the population, is expanding as well (Fiedler, 1994; Iunes, 1994). In 1994 there were 37 private hospitals with 10 to 128 beds, with a total of over 1,000 beds, largely concentrated in San Salvador. Clinics offer a range of diagnostic services. Private laboratories and a large number of private pharmacies can be found in all areas of the country (Iunes, 1994; Fiedler, 1994). In addition, there are extensive, although more fragmented NGO services.⁷ As will be discussed below, NGOs support broad health promoter networks in some parts of the country, but no consolidated information is available on this and there is no standard approach.

⁶ The ANSAL study provides an excellent review of the sector (Fiedler et. al., 1993), its epidemiology (Ayalde, 1994), public infrastructure (Zúniga, 1994), financing (Fiedler, 1994), and community perceptions of health and access to services (Kolodin, 1994), among other topics.

⁷ Each health NGO also has other community goals. AGAPE, ASALDI, ASPAS, KNAPP, ASIPES, VISION MUNDIAL, FUNDEMUN focus on preventive care and treatment of mothers and children aged 0-5. Other NGOs deal almost exclusively with gender issues and intra-family violence, while others have god-fathering programs to raise children outside poverty (CONAMUS, VISION MUNDIAL and PLAN PADRINO). Many NGOs also have an environmental objective.

Characteristics of MSPAS and NGO Promoters⁸

During the civil war, rural health care in El Salvador was largely the purview of NGOs, both international and domestic, with networks of clinics, community health promoters and a few hospitals. Since 1990, however, there has been a significant investment in a public network of health promoters. These low-skilled workers (typically with 4 years of primary education and 12 weeks of health training) provide basic preventive and treatment services in their communities. There are 396 MSPAS facilities: health posts, health units, health centers, and hospitals distributed throughout the 14 Departments and 2,564 cantons (MSPAS, 1996). The characteristics of the MSPAS facilities are shown in Table 3. In 1995, there were 1,438 MSPAS community health promoters, and an additional estimated 2,458 NGO promoters are active, but the data are unreliable.⁹

The characteristics and practices of public and private promoters were obtained through interviews with promoters in the sampled villages and are summarized in Table 4. In the sampled communities, about half the promoters are female (nationally it is about two thirds of all promoters). The promoters have about 7 or 8 years of schooling, live in the community and are full time workers. MSPAS and NGO promoters target women of child-bearing age and children aged 0-5.¹⁰ Their primary duty is preventive education; they participate in immunization campaigns coordinated by MSPAS and refer patients to MSPAS or NGO facilities.

⁸ There have been two major trends in deployment of health promoters. Starting in 1976, *Ayudantes Rurales de Salud* (Rural Health Aides) were community leaders assigned by the community to support rural health in a general assembly. In 1982, the *Ayudantes Comunitarios* (Community Aides) Program emerged with social workers and academic degrees in health as promoters. In 1983, HOPE and UNICEF established *Ayudantes Comunitarios* Programs. Competition among these 3 groups led MSPAS to institutionalize the *Promotor de Salud Comunitaria* (Community Health Promoters) in 1989, and to hire its own public promoters. The end of the war also made such a program possible.

⁹ A recent MSPAS publication suggests there are 247 NGOs, while the official list of NGOs providing services is 172.

¹⁰ According to MIPLAN (1994), 27% of the population of El Salvador are women in child-bearing age and 38% children 15 years old and younger.

**Table 3: Public Health Facilities,
Characteristics and Staffing, 1995**

Facility	Types of Care
Health Post (Puesto)	<ul style="list-style-type: none"> • Inpatient: None • Outpatient: twice a week
Health Unit (Unidad)	<ul style="list-style-type: none"> • Inpatient: None • Outpatient: 5 days a week
Health Center (Centro)	<ul style="list-style-type: none"> • Inpatient: 100 beds on average; 7 days a week • Outpatient: 5 days a week
Hospital	<ul style="list-style-type: none"> • Inpatient: 125+ beds; open 7 days a week • Outpatient: 5 days a week

1/ In larger health units.

Source: MSPAS 1995a.

Promoter training is highly standardized. MSPAS conducts a 12-week Basic Accreditation Program for all promoters. At best, one day of training per month for the subsequent three months in a MSPAS facility or in San Salvador occurs, but there is no consistent continuing education or supervision for public promoters. NGO promoters receive the standard 12-week Basic Accreditation Program training, but are provided periodic training in areas of specialization. For example, basic training for ADS family planning promoters lasts two weeks; AGAPE's training eight weeks, one or two days bimonthly for KNAPP, and one to two weeks per month for CONAMUS.¹¹ Interviews with NGO promoters indicate that frequent training is the single biggest productivity booster and incentive among promoters. In their words, "*training empowers us to perform better and to follow our commitment to the community*".

At the end of the Basic Training Program, all promoters receive a certificate and the Health Promoter's Manual (*Manual del Promotor de Salud*), to be used as reference thereafter (MSPAS, 1992). Most promoters in the field have it. The guidelines state that the promoter is responsible for promotion, prevention, treatment and environmental sanitation in seven areas: child health, reproductive health, dental health, basic health assistance, first aid, basic sanitation, and, health education.¹²

Health promoters are expected to be community leaders and to hold periodic meetings with the community. MSPAS workers are expected to visit low-risk homes once a month, and high-risk homes every two weeks, 8 to 12 households daily. NGO visits range from twice a month to once every month and a half depending on the organization.

MSPAS promoters focus on health care promotion and education through "chats" mostly on hygiene. They check records on immunizations, well-baby care, pre/post natal care; and, follow-up health facility consultations. NGO providers offer, in addition to these functions, pre and post natal care, well-baby care, antibiotic treatment for acute respiratory infection (ARI) and enteric diarrhea infection (EDI), and supply contraceptives.

¹¹ COSDECSAM's initial training in natural medicine is 3 months over three consecutive years, followed by maintenance training 1 day per month.

¹² The manual designates the following activities to the promoter: (1) prevention, assistance and referral in cases of ADI (acute diarrhea infection); (2) prevention, assistance and referral of ARI (acute respiratory infection); (3) promotion, detection and referral of pregnancies; (4) promotion of post-natal care and newborn care; (5) promotion and assistance in family planning; (6) promotion of child growth and development; and (7) promotion and assistance in basic sanitation programs.

MSPAS promoters indicate that they have inadequate equipment (first aid kit, stethoscope, measuring tape, thermometer) and medication (missing is, at least, ORS, acetaminophen, analgesics, and parasite pills). Some admit they have nothing to offer other than a referral. NGO promoters (ASALDI, AGAPE, ASPS, ASIPES, CAPS) usually carry or at least have in their home/office: stethoscope, tensiometer, first aid kit, acetaminophen, antibiotics--Amoxicillin, Bactrim, Salbutamol--prenatal vitamins, iron supplement, thermometer, adult and baby scale. These basic complementary inputs that give NGO promoters credibility and something to offer their patients other than reminders that are the basis of MSPAS promoter functions.

MSPAS promoters typically receive a monthly salary of c/ 2,365 (US\$272), plus health insurance and other public employee benefits. Only the best paid NGO promoters from the sample (KNAPP, AGAPE AND ASALDI) reach or exceed an MSPAS promoter's salary, but some NGOs offer attractive benefits.¹³ ADS promoters, who work out of their homes earn sales commissions on family planning products, charge about c/ 3.00 - 3.50 for a cycle of pills, and c/ 15.00 for Depo Provera shots. The NGO supplies them with birth control pills and shots at wholesale prices (c/ 2.00, and c/ 10, respectively). PRO-VIDA promoters also earn sales commissions on contraceptives.

According to the MSPAS promoters interviewed, they are supervised monthly by a designated supervisor (*supervisor específico*) usually at the promoter's assigned health facility. During the meeting of supervisor and 8-12 promoters, the supervisor checks monthly household coverage, gets an up-date on high risk cases, and approves the work plan for the following month. The meeting takes about two hours. In contrast, from the 20 NGO promoters in the sample, supervision occurs anywhere between once a week and once a month. NGO supervisors are generally a physician or a nurse, and supervision occurs in the community where they work, or directly in the field.

MSPAS promoters do not charge for visits or medication. NGOs have traditionally not charged fees, however there is growing realization that fees are key to maintaining NGO viability, as foreign financing is declining with the end of the civil war. Most NGOs now charge nominal fees for visits, medication or both (typically c/ 2-5). Credit is extended for delayed payment, or payment is simply waived at the discretion of the promoter. Interviews suggest that cost recovery is a new and important issue for NGO promoters.

Thus government and NGO programs appear to overlap and have similar objectives. The most striking difference is the availability of complementary inputs among NGO promoters, and the greater compensation of MSPAS promoters. These issues are discussed further below.

¹³ For example, an ASALDI promoter earns thirteen salaries of c/2,000, plus the Christmas bonus of c/666, uniforms, shoes, 10 paid days of annual leave and 1 to 2 days of sick leave per year. This however, is an exception.

4. Health Service Access and Utilization

Two important determinants of household demand is physical and financial access to health care. Where access is adequate, nonuse becomes a public policy issue as it raises the question of what services should be provided since government has committed itself to meeting the demand for health care. These issues are examined through analysis of physical proximity, knowledge of health care options, financial and logistical impediments to access, and revealed preferences based on household health seeking behavior. The trade-offs between public and private demand, and how households weigh price and quality are the focus.

Physical Access to Providers. Much of the rationale for primary health care and for government investments in health care for the poor is to reach isolated, low income communities with health care services. Hence the primary concerns are physical access and distance to care. Distance to the closest public and private services is provided for 21 of the sampled communities in Table 4. As would be expected, typically public health posts and units are most accessible. In six of the communities, any type of care is 12 or more kilometers away, but only two must rely on a health center or hospital that are more than 20 kilometers away from the village. NGO facilities are fewer, but in some cases compensate for public facilities that are farther away. Private physicians and hospitals are typically farthest away.

The most common modes of transportation for seeking medical assistance include: on foot, horse or mule; on foot to catch the bus, and commercial pick-up truck. For emergencies during off-hours (between 5 p.m. and 5 a.m.) hiring a pick-up truck to transport a patient to a health center or hospital around 20 kilometers away costs between c/ 100 and c/ 500 (US\$12.00-60.00). In communities without electricity and with poor roads, pick-up trucks often refuse to accommodate such requests due to the eroded roads, and the risk of being assaulted. Alternatively, families transport patients in a hammock carried by 2 or 4 men: *"In case of emergency we carry the sick in a hammock. The road is so bad that even trucks refuse to drive on it"* (San Antonio de Opico).

Lack of accessible roads was stressed by focus groups as the single biggest deterrent to seeking health care services. Private vehicles are few and bus service exists directly to only some villages, but typically with only two round trips per day. In 18 of the communities, people walk between 30 minutes and 2 hours to a bus stop, or walk for one or two hours to the facility. In short, facilities exist but they are often difficult to reach.

In general there is physical access, but the extent of accessibility is defined by convenience, quality and cost, as these determine whether households can take advantage of the proximity.

Table 4: Physical Access – Distance to Closest Health Providers*
(approximate kilometer)

Canton	Public Health Unit/Post	Public Health Center/Hospital	NGO Clinic	Private Physician/Clinic
La Hachadura	in situ	60		
Belen Guijat	in situ	12		12
San Miguel	in situ	32		
Punta Remedios	12	25	12	12
El Pinar	1	3/56 ^{b/}	2	
Potrero Sula	in situ	11 ^{c/}	in situ ^{a/}	
San Antonio	12	3 ^{c/}	in situ	12
San Isidro Lempa	12	5 ^{c/}		
Palo Grande	3	26	2	
El Caulote		1		
Candelaria	2	25	1	1
El Pimental	2	8/37 ^{b/}	in situ ^{a/}	
Nombre de Dios		21		21
El Tortuguero	12			
El Socorro		27	7	27
Santa Anita	5	22	2	25
San Juan del Gozo	6	8		1 ^{c/}
El Palon	3	6/26		26
San Felipe	3	15		3
El Copalio	4	35		
Las Delicas	3	12		

* Incomplete, only 18 cantons have data.

^{a/} Family Planning NGO.

^{b/} Health Center and Hospital distance.

^{c/} Distance to road only.

Information about Providers. Participants in every group, both women and men, were aware what health care facilities existed, although not all had used them. Even in remote areas, awareness of health care facilities is not a problem.

Due to restricted mobility, rural households only visit a facility for serious illnesses. The demand for preventive care, such as well baby care, pre/post natal care, and family planning, is confined to a small minority of people who have easy access to services and are motivated. Immunizations, in contrast, are typically delivered to the households. This pattern is consistent with behavior of most societies as households seek assistance only for a serious medical problem, and least frequently for preventive measures like immunization. In rural El Salvador this tendency is compounded by physical barriers.

Convenience and Indirect Costs of Access. Participants in all focus groups, irrespective of age and gender, complained about the limited hours of operation of the seven MSPAS health posts and 18 health units. Facility schedules range from 5-7 hours for health units to somewhere between 6 and 24 hours for health centers. Hospitals typically remain open 24 hours. Waiting times and evaluations of overall satisfaction for these facilities are shown in Table 5. Waiting times vary, but on average range between

two and five hours for public facilities, and one to two for NGOS. Hours of operation vary as well, with MSPAS services following a set schedule and offer 24 hour service only for some hospitals and health centers. The most common comments in the women's focus groups regarding convenience can be summarized as follows:

- *"Health posts operate only twice a week. Consultation is only until noon. The doctor is not always there. Sometimes only the nurse assistant is present. Waiting time is three hours on average. Only those who arrive by 8 get a consultation."*

The focus groups with men indicate that their perceptions of health services are more general and more critical than those of women. Their issues often occur in off-hour emergencies, and their illnesses often require specialists. Therefore, they are largely concerned with time requirements, the cost of services, cost of transportation and distances traveled. Health facility schedules and insufficient hours of operation were the major source of discontent. This, plus the lack of medication at most facilities, represents a high cost as men need to take 1-2 days off from work. It was stressed, however, that waiting time at NGO clinics was only 1-3 hrs. It was a general perception that services at MSPAS health posts and health units were targeted at children, and pregnant or breastfeeding women. For their own health needs, men said they sought services at the closest health center or hospital, but preferred private clinics and physicians whenever they could afford them.

Men were puzzled about specific questions regarding health facility staff. Sixty percent of men have no idea of who the staff at MSPAS facilities are, nor are they aware of what services are provided. In seven communities, men complained about the quality of services at MSPAS health units and health posts; in two others they found facilities satisfactory. The only community with a health center was satisfied with it, although access was seen as difficult due to waiting and operating hours.

In general, participants' comments were more positive about health centers and hospitals, because of longer hours, availability of emergency service, a more adequate medication supply, staff, and specialists. If they had a choice, people would choose these facilities over health posts and health units. Waiting time is equally long or longer, but people know they will be treated in those facilities. Thus, poorly functioning primary care services lead to more intensive use of higher level facilities.

Table 5: Average Waiting Time and Patient Satisfaction

Canton	Health Facility	Reported Average Waiting Time (Hours)	Overall Satisfaction ^{a/}
La Hachadura	La Hachadura Health Unit	4-5	3
	Cara Sucia Health Unit	2-3	4
	Sonsonate Hospital	4-5	5
Belen Guijat	Metapan Health Center		5
	Belen Guijat Health Unit	2-3	3
San Miguel	San Miguel Health Unit	3-4	5
	Santa Ana Hospital	3-5	5
Punta Remedios	Acajutla Health Unit	3-5	1
	AGAPE Health Clinic	1	5
El Pinar	San Ignacio Health Post	4	3
	La Palma Health Center	4	5
Potrero Sula	Potrero Sula Health Post	2-3	4
	Nueva Encarnacion Health Center	2-3	5
San Antonio	Opico Health Unit	3	3
	Arzobispado CAPS Clinic	1-2	3
San Isidro Lempa	Tacachico Health Unit	3-4	2
Palo Grande	Rosario de Mora Health Unit	3-5	3
	Malta Clinic	2-3	5
	Los Planes Hospital	4	4
El Caulote	Suchitoto Health Center	3-5	4
Candelaria	Sto. Tomas Health Unit		
	S.F. Chinameca Health Post	3-4	1
	CARITAS Dispensary	.5	
	Traditional Healer	1	2
	Santiago Texacuango Health Unit	3-4	3
El Pimental	Amigos Health Post	1-2	4
	San Luis Talpa Health Unit	3-4	2
	Santa Clara Clinic	3-4	2
	Texacuango Hospital		
Nombre de Dios	Sensuntepeque Health Center	4-5	4
El Tortuguero	Santa Clara Health Post	.5	4
El Socorro	Hermano Pedro Clinic	1-2	5
	Mujer San Nicolas Clinic		4
	Zacatecoluca Hospital		4
Santa Anita	Mercedes Umana Health Unit		4
	Guadalupe Health Center		4
	Order of the Malta Convent Clinic	1-2	5
San Juan del Gozo	Mendez Health Unit	3-4	1
El Palon	Lolotique Health Unit	2-3	5
	Nueva Encarnacion Health Center		
San Felipe	Jocoro Health Unit	2-3	2
	San Miguel Hospital		
	El Divisadero		
El Copalio	San Alejo Health Center	4	3
Las Delicias	Sta Cruz Michapa Hospital	2-3	5
Carolina	San Francisco Health Post	1-2	5
	Carolina (El Tubo) Health Post	3-4	2
	Ilobasco Hospital		
Santa Rosa	Ciudad Arce Health Unit	3-4	5
	Demografi Hospital		
	Maternity/San Rafael Hospital		

^{a/} Range is 1-5 with 1 the worst and 5 the best

Source: Focus Groups

Women's focus group participants frequented five NGO facilities (operated by AGAPE, CAPS, CARITAS, and two by Order of Malta Convent). Their general perception is that staff (physicians and nurses) are reliable, experienced, have equipment and medication. Although they charge for a consultation and/or medication, it is worth it. Waiting time is on average 1-1/2 hrs. "[The clinic of Malta] charges c/15.00, that is c/13 more than (the health unit) Rosario de Mora, but it is considered worth it because it is well equipped. Only one trip is necessary" (Palo Grande). In the three communities with a choice among MSPAS health posts or health units, and an NGO facility, men strongly preferred the latter.

Drug availability often appears to be a determining factor for choosing a facility. The general perception throughout the country is that health posts and health units do not have as much medication as they used to, and people are reluctant to go to facilities where there is a low probability of having adequate stocks of medication. Medication is believed to be more readily available at health centers and hospitals, at prices significantly below those at pharmacies. If drugs are not included in the consultation fee, they are dispensed from the pharmacy inside the facility at nominal costs. Most patients walk out of a health facility with at least one prescription in hand.

Direct Costs of Access. Direct costs of services vary quite dramatically, as evidenced by information from both the EHPM and Focus Group Survey. Table 6 summarizes information on costs and utilization from the rural sample of the EHPM data. Most striking is that the direct costs for private sector consultations are so much higher: 10 times higher in terms of fees and 7 times the average for medication. Patients seeking private sector options also spend on average 50 percent more in transportation costs.

The EHPM data indicate that private care is sought for children in 5.5% of illness episodes, public care in 26% of episodes, and nothing, self-treatment or traditional healers in the remaining 68.5 percent of episodes.

Despite the views of men, women use more private care than men do, and are more likely to seek care overall. The former is contrary to what men and women claim in the focus groups. Indeed, the data indicate that women are more likely to see a private provider than men. However, the proportion of overall expenditures is roughly equivalent for men and women, suggesting that average spending is lower for women than for men. High utilization by women is consistent with the high fertility of Salvadoran women, and with patterns evident in other parts of the world. Children consume public services about five times as frequently as private, but also seek care most frequently. In summary the demand for private services is significant, and relatively high costs do not appear to deter a large segment of low income consumers (see next section).

Costs reported in the focus groups are consistent with the data from EHPM. Figure 2 summarizes the costs of medical and bus transportation by type of service. Average costs (consultation and treatment) are highest for private physicians and clinics

at c/61, but vary from about c/25 to c/200 depending on the circumstances.¹⁴ Public and NGO prices are lower and less variable, with health posts and units charging c/5 and NGO clinics an average of c/ 5 but with a high of c/30; in both cases, medication is included when available.¹⁵ Well baby care, pre/post-natal care and immunizations are free of charge in MSPAS facilities.

Table 6
Average Expenditure and Utilization Patterns for Public and Private Providers

Expenditure/Utilization	Private Physician Clinic/Hospital	Public Health Post Clinic/Hospital
Expenditure (Colones per consultation)		
Transportation	c/9	c/6
Fees	c/68	c/6
Medication	c/152	c/19
TOTAL	c/229	c/31
Utilization		
Children	5.5%	26.0%
Women	10.7%	19.1%
Men	5.7%	16.9%
TOTAL ^{a/}	7.2%	21.7%

^{a/} Percent of all illness episodes. The remaining 71.1% did nothing, self treated or relied on traditional medicine.

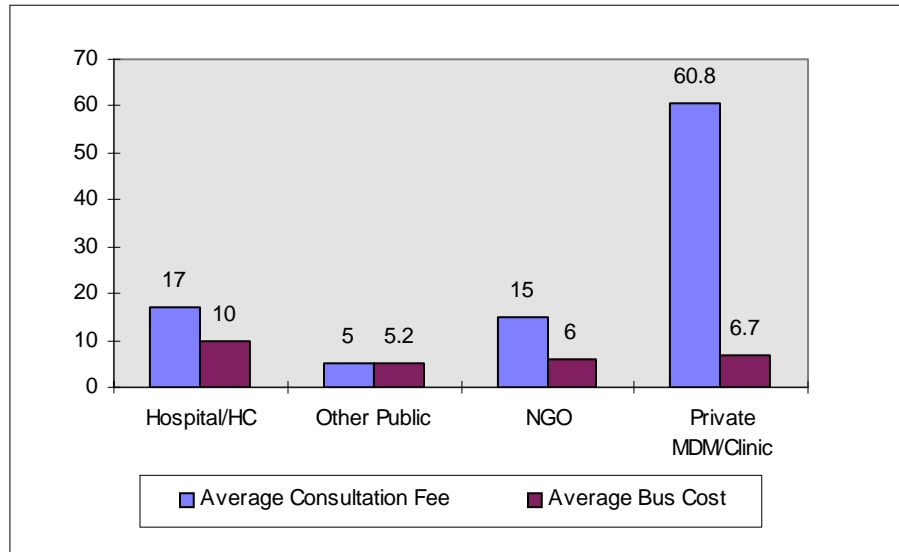
Source: EHPM, 1994, rural subsample.

Public hospitals and health centers charge on average c/17, but can reach c/60 in some circumstances. For outpatient care, a c/1 per prescription is charged, and an average of c/10 per visit is charged to see a specialist. Public hospitals also reportedly reduce fees where patients indicate they cannot afford to pay. These prices and pricing schemes are not surprising given the emphasis on reaching low income households. The availability of more expensive private services provides additional choice, particularly to those with higher incomes, and those willing to substitute expenditures for time.

¹⁴ Private midwives, whether certified or self taught, charge between c/10 and c/100. Often, as often found in other countries, the baby's gender determines the fee with a 30% hike if the baby is a boy.

¹⁵ NGO cost recovery strategies differ. AGAPE clinics charge c/12.00 per visit and 50% of the retail value of medication. CAPS does not charge for consultation, but charges a nominal fee for drugs. CARITAS charges c/10.00 per visit, including medication.

Figure 2: Comparison of Service Costs in Focus Group Sample by Type of Provider



Bus costs are typically a smaller cost component than consultation fees and vary less by provider. It is most expensive to reach a hospital or health center (c/10), but the difference between public and private clinics (c/5.2 and c/6.0, respectively) and private physicians (c/6.7) is only about c/1.0.

The ten focus groups with men, using services presently available and current fees as a basis, evaluated "reasonable" costs. Current fees were not considered unreasonable by the men. In most groups, consensus was reached without much discussion on the acceptability of a consultation fee of c/15 to c/25 provided that the facility would: (i) be easily accessible to their community, (ii) offer the variety of services hospitals or private clinics have, (iii) involve waiting time that would not exceed 2 hours, (iv) keep extended hours of operation, and (v) provide the prescribed medication.

Patient Satisfaction and Impediments to Service Access. The focus group results suggest four related issues that determine consumer satisfaction with health services: convenience of the clinic hours, waiting time and off-hours availability; staff availability, and the perception of their competence and performance; availability of drugs at the health facility; and cost. Furthermore, they identified (i) inaccessibility (broadly defined) to health services and their limited hours of operation, and the lack of staff and resources (especially medication) in health facilities; and (ii) poor infrastructure, especially limited road access and lack of clean water and sanitation, as major problems.

The focus groups explored community expectations in the health sector and particularly the role of government. In general, these rural communities indicated that they expected the Ministry of Health to provide facilities, trained staff and medication at low cost, and also to monitor their health with free door-to-door service. They expect government and NGO physicians, nurses and promoters to be able to diagnose and treat their illnesses. Health education may be appreciated but it is not considered essential.

These expectations, while probably unrealistic, are consistently expressed across communities.

Table 7 applies the EHPM rural survey to show the deterrents to use of health services, i.e., those factors reported as reasons for not seeking a service (in a given illness incidence). The table distinguishes among respiratory, gastrointestinal and other health problems. Cost poses serious impediment, with distance a far second. As indicated above, and as evident here, respiratory illness is very common; moreover households have come to recognize the illness and often either self treat or wait out the illness.

Table 7: Reasons for Not Seeking Treatment by Illness type

Illness Type	Poor Attention	Services too Far Away	Un-Affordable	No Doctor	No Confidence in Provider	No Medication Available	Not Permitted	Not Necessary
Respiratory	2.51	8.03	33.95	0.42	3.26	0.75	0.75	50.33
Gastro-intestinal	3.5	18.88	34.97	0.00	2.10	0.70	2.10	37.76
Other	7.25	7.55	43.81	1.81	7.25	0.30	0.91	31.12

Source: EHPM Rural Sample, 1994.

EHPM also provides information on dissatisfaction and satisfaction when care was sought. Dissatisfaction with outpatient services is caused by long waiting times at MSPAS facilities (16% of respondents complained), and attitudes of personnel is a problem at ISSS facilities (6%). Satisfaction is highest for private care whether traditional or modern (97-99%).

Focus group discussions about women's general perceptions of public sector staff competence and performance can be summarized as follows: (i) Public health posts and health units are not staffed adequately to respond to the demand for health services in rural areas. More trained medical staff is needed. (ii) Residents at health posts and health units, who are in unsupervised practical training (*Año Social*) are not as reliable as those found in health centers and hospitals. (iii) Nurses and assistants at two health units and one health center were sometimes faulted for favoring friends/relatives with medical assistance and/or medication. The adjective used to qualify them was "*repugnantes*". (iv) There were no complaints voiced regarding malpractice or incompetence, ill treatment or abuse on the part of medical staff at health centers, hospitals, NGO facilities, or private clinics. Furthermore, the women expressed a desire for certain kinds of services, and articulated the shortcomings in available services, particularly with regard to the lack of medication at public facilities.

When men addressed the issue of quality of services, their judgment was based on perceived reliability of staff, and quantity and quality of equipment. Men favored larger and well equipped facilities, such as MSPAS health centers and hospitals which have more specialized staff, and a larger stock of medication. They favored NGO facilities because a physician would always be available.

Households clearly have strong views about the health care options facing them and the problems each engenders. These perceptions and opinions provide an important backdrop to subsequent discussion of consumer behavior and treatment success.

Community Utilization Patterns. The utilization patterns of the community were discussed at length in the focus group and explored in the EHPM (see Table 6).

Home treatment is a popular method of treating illness and includes herbal teas, often mixed with natural or synthetic drugs, religious and cult practices, as well as the use of leftover medication from a previous illness. However, the frequency of these practices vary according to illness, health service accessibility, and the satisfaction of individuals with available options. Self medication is reported in approximately 50% of illness episodes nationwide. It occurs across all income groups but is less frequent among higher income households and in urban areas.

The more accessible and effective the provision of health services, the less frequent is self-medication. Thus, self-medication is consistently higher in those areas where there are no health facilities or facilities that receive low rankings from users or promoters (see Table 5).¹⁶

People's perception of their illness, the quality of service, the distance to the facility and the cost involved (direct and indirect) all play a role in facility preferences. The highest approval rating was given to the San Miguel Health Unit in El Salvador's second target city San Miguel. Average waiting time is 3-4 hours, and the facility was rated a 5 by users.

Distance to provider also plays a role. Although high praise was given to Sensuntepeque Health Center, and both men and women at Nombre de Dios rated it 5, only 20% of patients attend this facility. The opportunity cost appears to be too high. A visit to this health center requires 2-3 days, plus transportation and room and board in Sesuntepeque. With limited transportation, people choose to stay closer to home. In sixty percent of cases, people self-medicate.

Health centers are ranked the highest (5) by both men and women. They have all the benefits of a hospital, operate seven days a week, offer a full complement of services (specialized staff, more permanent staff, extended hours of operation during the week,

¹⁶ In San Felipe, 86% of people self-medicate, and the remainder indicate that they seek private medical attention in Jocoro. The closest facility, Jocoro Health Unit, is three kilometers away by foot, and ranked 2 on a scale of 1-5. The access road is unpassable and there is no public transportation. The lowest rates of self-medication occur in Santa Rosa (23%) and San Isidro Lempa (20%). The former is a community with 4 health promoters and two accessible MSPAS facilities. The closest facility is the Ciudad de Acre Health Unit, which was rated a 5 on a scale of 1 to 5 by users. Promoters in this community (MSPAS, ASALDI, World Vision) received favorable ratings as well.

and a larger stock of medication), and still charge fees that are the same as or lower than those of a health unit. When health centers are close to the community, people say they have no reason to go anywhere else. This is the case in El Caulote, where 62% visited the Suchitoto Health Center the last time they were ill.

Poor services at facilities also affects community perceptions and utilization. Such is the case of the Belen Guijat Health Unit, which is located in the community, but criticized by men and women for its poor schedule and lack of medication. Survey results suggest that few use the facility, as no one in the focus groups chose this health unit during the last episode of illness. In the community, 50% chose to self-medicate and 40% attended the Metapan Health Center, 12 kilometers away.

Finally, private health services are preferred where affordable. In urban areas, private health services are favored by 17.5% of users, but households with incomes over c/.3,000 (US\$420) a month rely almost exclusively on private services. In urban areas, waiting time is the single biggest complaint, with 15.8% of households stating this as a problem in public facilities, but only 2.7% indicating the same for private facilities. (EHPM, 1994).

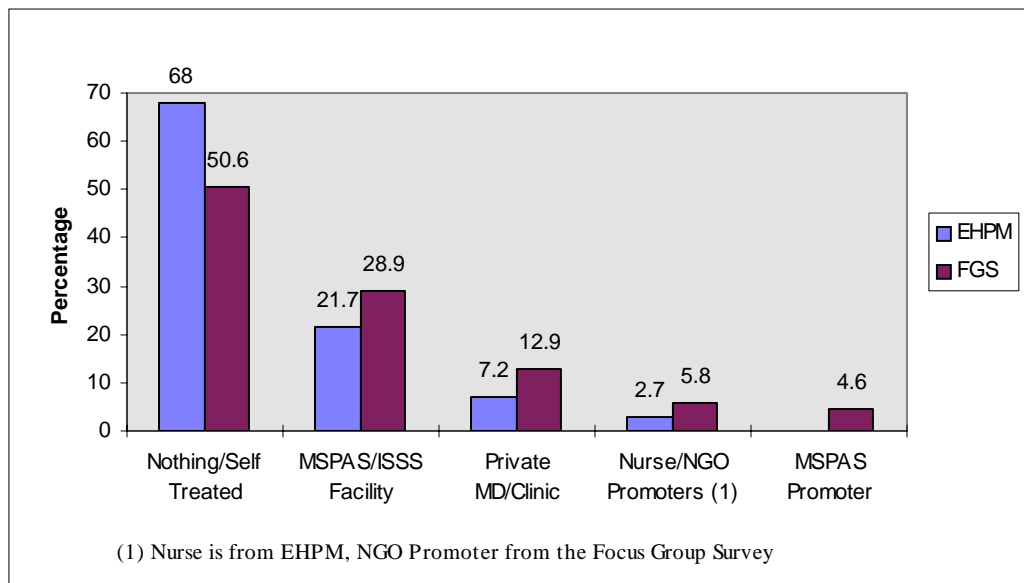
In summary, the revealed preferences and decision-making of the rural communities are in keeping with both economic theory and common sense. Households appear to use the services that have the highest likely return and the lowest direct and indirect costs. An important question is whether the demand for public and private care conveys something about perceived quality in public and private care.

5. Patterns and Determinants of Health Seeking Behavior

The provider options in the EHPM and the Focus Group Survey (FGS) are not entirely consistent in definition. Figure 3 summarizes the results from the two surveys, combining categories where possible to maximize comparability. What is most striking about the findings is the large proportion of self treatment -- 51% and 68%, respectively, from the FGS and the EHPM. This category includes traditional medicine (herbs, natural drugs and cult practices), using leftover medication from a previous illness of some member of the family, and not treating the illness at all.¹⁷

¹⁷The difference in provider options queried, sample size and time between the two surveys (1994 versus 1996) may account for some of the differences in reported self treatment.

Figure 3
Pattern of First Consultation in EHPM and Focus Group Survey



Source: EHPM; rural sample; and Focus Group Survey.

MSPAS health centers and hospitals were selected first by 6.6% and 4.6% of patients, respectively. As discussed above, health centers are popular among users, but they are typically further away than the more basic health posts and health units. Nevertheless, the perception of quantity and quality of services, and their modest fees make them attractive alternatives. Most focus group participants saw health centers (or clinics with the same services as the health center) as the ideal health service provider, and expressed their desire to have one in their community.

The number of people from the focus groups who sought care from MSPAS Promoters and NGO promoters and clinics was 4.6 and 5.8 percent respectively.¹⁸ MSPAS promoters by design have a preventive mission and this may leave them ill equipped to treat health problems.

Although private clinics and physicians charge up to five times more than an NGO facility, and up to ten times more than a MSPAS facility (see Table 6), 12.9% of the focus group sample chose to visit a private provider the last time they were sick. This rate is low in comparison with men's and women's stated preference for private physicians in the focus groups. However, private services are not available in their communities, and are costly in terms of time, transport and service.

The reported success rate in the focus groups varies by provider type, as indicated in Table 8. These data from the Focus Group Survey alone, indicate an average success

¹⁸ Focus group participants did not distinguish between NGO promoters and clinics, and viewed them as part of a whole.

rate of 73%, with MSPAS promoters having the lowest success (57%), and private clinics and physicians the highest (87%). The remarkable result is that despite the small sample size the variation outside these two extremes is minimal, as the success rate for the other providers is about 73%, including that for self treatment. The latter suggests the importance of pharmacies and local shops as health service providers, and that (selective) self treatment is convenient, inexpensive and largely successful in the experience of rural households. Although based on a small sample, these findings suggest that households sensibly evaluate their illnesses, costs and the probabilities of satisfactory outcomes when making decisions about treatment.¹⁹

Table 8: First “Consultation” for Last Illness and Reported Success Rate

Providers	Number of Patients	Distributions of Patients (%)	Success Rate (%)
Self Treatment	122	50.6	68
MSPAS Hospital/Health Center	27	11.2	78
MSPAS Health Posts/Units	36	17.7	72
MSPAS Promoter	11	4.6	57
NGO Promoter/Clinic	14	5.8	71
Private Clinics/Physicians	31	12.9	87
Total	241	100%	73%

Source: Focus Group Survey

Prohibit analysis was applied to model the probability of successful treatment, to control for the multiple factors that affect that success. Table 9 summarizes these results, presenting the odds ratios associated with each variable. Among the significant variables, age is inversely related, indicating that the younger the patient the more likely treatment will be successful. If the patient has a respiratory illness, treatment is more likely to be successful. Among the various types of providers sought for treatment, only the private doctor/clinic choice has a significantly higher likelihood of successful treatment. Also, having an NGO provider in the village is significantly associated with a higher success ratio. Other factors, such as education or availability of a MSPAS promoter, have no significant effect on successful treatment.

These findings are consistent with the views expressed in the focus groups -- that the private sector (and high-end facilities, such as public hospitals) are more reliable sources of health care. The fact that most NGO promoters are better equipped with antibiotics, other drugs and diagnostic tools, may make them more effective providers than MSPAS promoters. This could explain the significant effect of having an NGO promoter, and the lack of an impact for MSPAS workers.

¹⁹ On the second try, self-treatment is significantly reduced from 50% to 3%. On the other hand, the choice of MSPAS health posts and health units increases to 30% and MSPAS hospitals to 25% and almost a quarter of the patients selected private clinics or physicians. Not surprisingly, promoters, both MSPAS and NGO, tend to play a minor role as the severity of an illness progresses.

Table 9: Probability of Successful Treatment: Odds Ratios

Dependent Variable: success=1; failure=0	
Variables	
Intercept	1.36
Age of Sick Person	0.75**
Education of the Informant Woman	1.02
Provider Type Sought:	
MSPAS Clinic	1.55
Private	2.93*
Others	1.80
NGO Promoter/Clinics	1.86
MSPAS Promoter	1.26
Disease Type:	
Respiratory Disease	2.04*
Gastro-intestinal Disorder	0.75
Presence of Promoter in Village:	
NGO Only	2.39**
Both NGO and MSPAS ^{a/}	1.62

** Significant at 95% confidence level;

* Significant at 90% confidence level

^{a/}The excluded type is MSPAS promoter only.

Source: Focus Group Survey

Determinants of Seeking Medical Treatment

Factors that determine health service utilization could be related to the illness episode or is due to behavioral and income characteristics, as well as to the access and quality considerations discussed earlier. This issue is analyzed here using logistic regressions. Table 10 shows the odds ratios for the variables hypothesized to affect treatment decisions. The first model explains whether any treatment is sought, the second explains when public care is sought given that public or private care is available.²⁰

In seeking care, age has a strong, significant, and consistently negative effect. Also, women are more likely to seek care than men. The type of disease significantly affects the decision to see a medical provider; with a (self-diagnosed) respiratory or gastro-intestinal problem, it is less likely that a provider will be sought.

Higher incomes are significantly and positively related to the likelihood of seeking treatment. The education of the patient does not influence medical treatment decisions, nor does the education of the prominent woman in the household (the decision-maker, grandmother or effective head of household). Access costs of distance, medical

²⁰ Again, we report on a few models representing the important findings from many alternative formulations. Importantly, models with promoter presence in villages were tried, but in no case does promoter presence (even when instrumented for) influence the care-seeking behavior.

consultation or drugs have no effect on use of any kind of service, a result consistent with the analysis in the previous chapter.²¹

The second model attempts to explain when public care is sought, given that some care is sought. The results are much as expected: age and gender are significant for the odds that care is sought but generally not in the choice of private versus public (although the oldest group is less likely to seek private care). Education has no significant effect on the private/public choice. Income, which positively affects seeking care, negatively affects public service use, which means that private care increases as income declines. Surprisingly, even in the model for public versus private care, no significant effect is detected for the factors representing the costs of the various alternatives.

These results suggest that households are more likely to seek health care if they have higher incomes or an uncommon illness (i.e., not respiratory infection or gastrointestinal problem). The results imply that rising incomes will help families use medical care more frequently in general, and also increase the role of private care. The results on the pattern of women and children using care (not shown) are consistent with results reported earlier, and with patterns observed in other settings. It is noteworthy that households often do not seek care for common ailments. This probably means that households with some precision can identify frequent low-risk ailments. It is important to note that costs do not pose a serious deterrent to use. This is consistent with the focus group findings

²¹ Variables for access and other costs were carefully built with a “choice set” methodology, assuming that an alternative and its costs chosen by one member in a village was a choice also open to others. Still, these variables proved insignificant in all model formulations.

**Table 10: Determinants of Seeking Any Medical Care and Public Care:
Odds Ratios**

Dependent Variable: Seeking Care Versus No Care		Dependent Variable: Seeking Public Versus Private Care	
Variables	Odds Ratios	Variables	Odds Ratios
Intercept	0.29**	Intercept	127.25***
Age Cohort		Age Cohort	
0 – 13	0.39***	0 - 13	1.00
14 – 19	0.34***	14 - 19	0.42*
20 – 44	0.48***	20 - 44	0.88
45 – 59	0.51***	45 - 59	0.38
60 plus	0.56***	60 plus	.43**
Gender		Gender	
Female	1.26**	Female	-0.75
Education: Prominent Woman		Education: Prominent Woman	
Educated	1.53	Educated	1.02
Information Not Available	0.96	Information not available	3.74
Income	1.33***	Income	0.49***
Medical Cost		Medical Cost	
Medical Consultation Cost	0.99	Private:	
Medication Cost	1.00	Facility Cost	1.00
Transportation Cost	1.00	Medication Cost	1.00
		Transportation Cost	1.00
		Public:	
		Facility Cost	0.99
		Medication Cost	1.00
		Transportation Cost	1.00
Type of Disease		Type of Disease	
Respiratory	0.38***	Respiratory	1.60*
Gastro-intestinal	0.55***	Gastro-intestinal	1.23

*** Significant at 99% confidence level; ** Significant at 95% confidence level; * Significant at 90% confidence level

Data Source: EHPM, rural sub-sample 1994.

Note: Logistic model. Model 1 probability of seeking care, Model 2: conditional upon seeking care, probability of seeking public care. Total per capita expenditure (logarithm) is indicator of income.

Role and Importance of Health Promoters

A significant finding from the interviews and focus groups is the limited competition and overlap of functions among promoters. Where there are both MSPAS and NGO workers, they have divided up households to ensure single coverage. It is not clear whether all the households are covered, but each house is visited by only one promoter. Word of competition among promoters for specific areas or functions did not surface either from the promoters themselves or their communities.

A success that appears to be linked to the promoters is in immunization coverage. In every single focus group and interview, it was asserted that MSPAS, in coordination with NGOs, reach the great majority of households with immunization coverage, and that the promoters accompany brigades to isolated communities. In 1995, reported immunization rates for DPT exceeded 95% for children under age one (PAHO, 1996), double the rate of less than a decade earlier.

In assessing the role of health promoters in influencing the decision to seek medical care, an extension of the models shown in Table 9 was examined. Adding the type of health provider available in the village shows that MSPAS promoters have no effect on the decision to seek care; but having both an NGO and MSPAS promoter available is associated with seeking treatment (model results not shown). But where there are NGO or MSPAS promoters, there is no impact on the decision to visit a *public* treatment facility.

The analysis included logistic regressions for the probability of consulting a promoter. These were based on the focus group survey, and each model was estimated on a subsample of villages for which the relevant promoter(s) is (are) available. The results are mixed, with data on the promoters and the patients able to explain very little in this decision. Two variables indicating the quality of promoters proved important: promoters with high initial training were more likely to be consulted, as were promoters who periodically visited household. There was, furthermore, indications that promoters who can dispense antibiotics were more likely to be visited. Other variables, such as village wealth, type of illness, and whether more than one promoter was available, have no significant effect on the consultation decision. Few observations and covariation resulted in weak and hard to interpret findings (see Table A5.1 in Lewis et al 1999).

These results give some support to the view that promoters are not frequently consulted and moreover have little impact on health seeking behavior. The general findings are in keeping with the views of the focus group participants. Indeed, the overall reaction of women to MSPAS and NGO promoters can be summarized by the comments below:

- *"[The MSPAS promoter] gives talks about immunizations, hygiene, how to clean the well, cleanliness of the house, how to burn garbage, etc., but doesn't have a scale and doesn't take blood pressure or give medicine. They only refer us to clinics." They*

regard the promoter as incapable of helping them. If they need assistance, they go to a health facility.

The focus groups also discussed the contribution of MSPAS and NGO promoters. These are summarized here:

- *"The promoter does the pre-natal check-ups in her home-office. She weighs them, she measures the womb. The promoter uses the tension meter and thermometer. She also listens to the baby's heart beat with the little thing (stethoscope). She also gives them prenatal vitamins. She performs complete check-ups." (San Isidro Lempa, ASALDI promoter).*

Where the level of education of the sampled communities is low, people become more dependent on a promoter to assist them in taking control over their preventive health care, and they are therefore more enthusiastic about promoter efforts. Also, in inaccessible communities the promoter's visit provides a sense of security and protection to villagers.

The men's focus groups were less sympathetic to health promoters, although they had less contact with them and rarely needed to rely on them. In two out of the ten cantones, there were no MSPAS promoters. In one of them, San Miguel, men were emphatic that they did not need one. In seven cantones served by MSPAS promoters, men are aware of the visits but were unaware of what the promoter did, other than educational chats. Men whose households are visited by NGO promoters (CAPS, AGAPE) are more knowledgeable of the services, especially when visits involve a fee. Most of the time men refer to the fact that MSPAS promoters earn high salaries for the work they do, but are not trained to treat patients. In two communities they stressed that promoters did not have a first aid kit. No references were made to the fact that NGO promoters also frequently earn a salary.

The derision of the communities is not lost on many of the promoters. In interviews with MSPAS promoters, they expressed their frustration with their ill-equipped situation and limited offering for their communities.

The quantitative results and the focus group findings are very consistent. People prefer private medical care, because they view it as of higher quality; and the outcomes of health service use support the perceptions as successful treatment is most closely correlated with visiting a private provider. Households self treat where the likely benefits of medical treatment are outweighed by the direct and indirect costs of obtaining professional input. And for less common ailments, households more frequently seek care, and particularly private care. Women and children consult providers more frequently than men do. Some additional findings from the quantitative analysis indicates that education and income encourage the use of health services. These are not surprising, but are important issues for policy.

The consistency between the different elements of the study also applies to health promoters. In general, they are sometimes appreciated by communities and

households for the efforts they make, but they are not considered an important source of medical advice or treatment. MSPAS promoters, because they have little but advice, find less support among communities than the better equipped, trained and supervised NGO promoters.

6. Policy Implications and Options

The results of the study suggest that public services are clearly valued where they meet the needs of the population. The population also has reasonable physical and financial access to health care services, although physical access is impeded by poor infrastructure. Information and experience lead to a preference for private health care services wherever possible even among low income households, because of their efficiency in terms of patient time use and probability of successful treatment. Waiting times are lower, and successful treatment incidence is higher when using private providers. Similarly, higher level health facilities are greatly preferred by the population because they offer “one stop shopping”: they can deal with a range of problems thereby lowering the opportunity and travel costs of seeking care; and are second only to the private sector in the rate of successful treatment.

So while there is an intention to make PHC complementary to hospital care they are similar in the population’s collective sense. This is partly attributable to large outpatient services at hospitals, and no doubt partly to the range of public and private services available in more urban areas where hospitals are located. The small size of El Salvador makes relatively urbanized areas more accessible, which may in fact undermine the need for a wide network of services, certainly where there are public and private PHC clinics in close proximity. Unlike many other countries, the armed conflict in El Salvador led to a network of private NGO providers in rural areas, which the government has attempted to replace once the conflict ended.

Demand for PHC is limited, particularly for public outreach services. While isolated communities appreciate contact with the public MSPAS workers, particularly for their ability to remind them about critical actions, most find them of marginal use partly because they have little in the way of diagnostic or treatment services. The NGOs are better equipped and supervised, are more appreciated, and are more likely to provide successful treatment. The lack of antibiotics clearly places the MSPAS providers at a disadvantage, but at the same time they have contributed importantly to high immunization coverage.

This stems largely from perceptions of low quality and the limited scope of offered services by PHC workers. Evidence from developing and developed countries suggests that households have little demand for preventive services. The policy in most countries of restricting small children access to day care or schooling options unless they are vaccinated was a direct response to a decline in immunization. Achieving preventive objectives is often best achieved either through information aimed at behavior changes and/or preventive messages delivered in conjunction with treatment for health problems.

The issue is whether the public PHC model is the best use of public funds. The results suggest under utilization, limited scope of services and high costs. Assessing alternatives may provide alternative approaches that may have greater impacts and lower costs. Health promoter tasks are largely preventive in nature. As has been documented in OECD countries, demand for health prevention is limited, and prevention is often best provided during curative or diagnostic procedures. Prevention is often most effective if woven into other messages or services.

Given the preponderance of radios, and to a lesser extent televisions, preventive messages may be equally effectively delivered via the media. Given the existing network of clinics, health centers and hospitals, there is ample complementarity. Similarly, because NGOs are already operating, are low cost, and combine prevention and curative services, contracting with NGOs could raise the cost effectiveness of public expenditures. The strong demand for private services could also be met through subsidies to NGOs who could continue to cover some costs through charges.

Where public (MAPAS) providers are considered imperative, there is a need to retain NGOs, improve infrastructure to raise access, and upgrade management and oversight of public workers.

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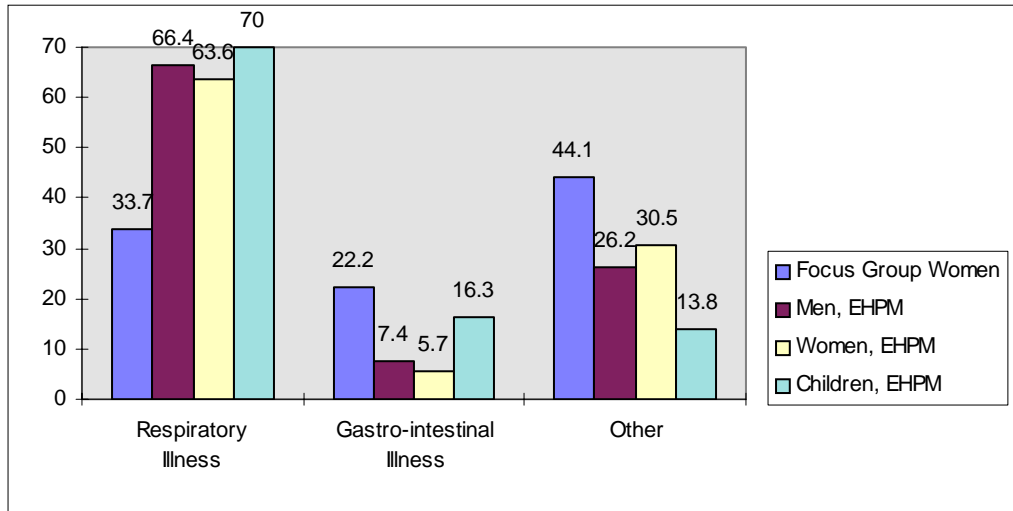
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Figure 1
Distribution of Illness Incidence in Rural Households
from Focus Group Survey and EHPM



Note: Figures from the village focus group survey and the EHPM rural subsample are not strictly comparable given differences in sample and the phrasing of questions

Figure 2: Comparison of Service Costs in Focus Group Sample by Type of Provider

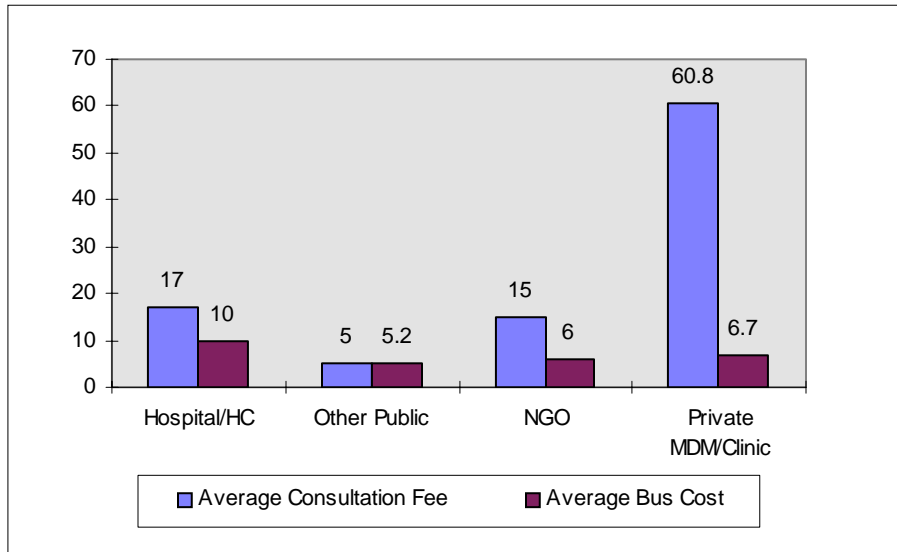
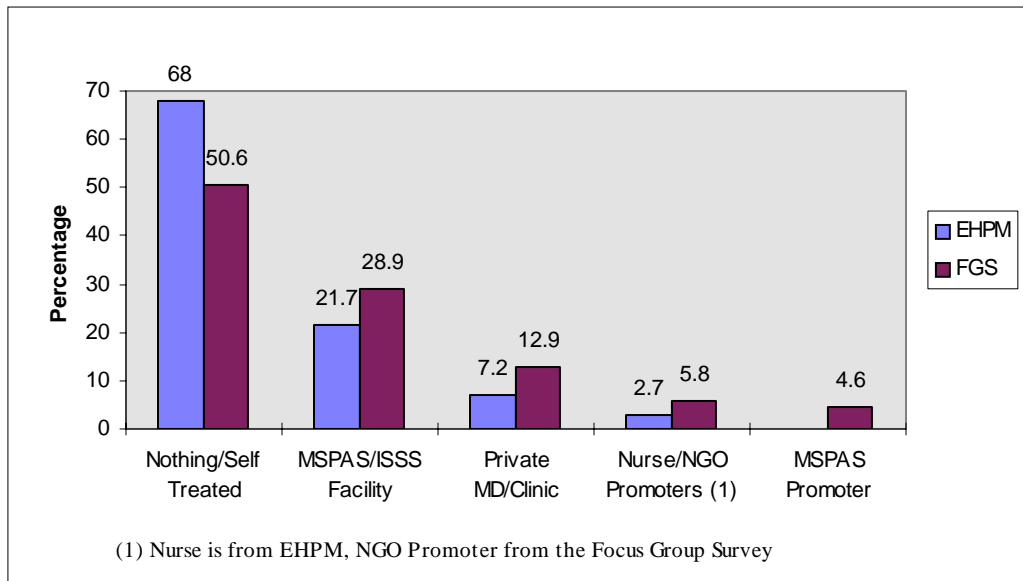


Figure 3
Pattern of First Consultation in EHPM and Focus Group Survey



Source: EHPM; rural sample; and Focus Group Survey.