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PRIVATE SECTOR HEALTHCARE SERVICES
IN ECUADOR

Evolution of the Ecuadoran Healthcare System

1984-1993

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Introduction

In 1994 *Initiatives* conducted a survey of private health facilities in Quito and Guayaquil to better understand the operations and management of the private health sector and the clients it serves For comparative purposes the survey also included a sample of public health facilities Four different domains of public and private facilities were identified for inclusion in the survey large public in-patient facilities, private in-patient hospitals and clinics public outpatient facilities and small private outpatient facilities

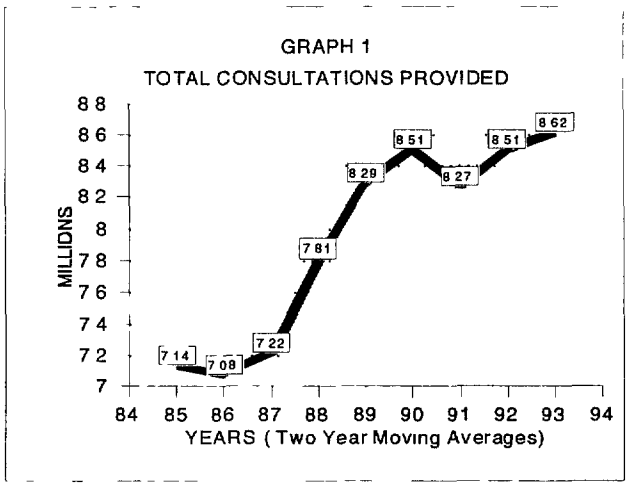
The necessary information about the facilities in the first three domains — public in-patient facilities private in-patient hospitals and clinics and public outpatient facilties — was taken from the annual surveys of the operations of these facilities conducted by the *Instituto Nacional de Estadistica y Censos* (INEC) between 1984 and 1993 Small private outpatient facilities — the fourth domain — were not included in these annual surveys Accordingly information about them was collected separately using the *Initiatives* survey instrument which was designed to allow comparisons with the existing INEC data The findings of this survey are summarized in a companion report *Private Sector Healthcare Services in Ecuador A National Survey of Private Health Facilities* which is also available from *Initiatives*

Because of the richness of the INEC data, *Initiatives* commissioned a longitudinal and in-depth analysis following the completion of the health facilities survey[§] In addition a brief analysis of the private health insurance market in Ecuador was conducted based chiefly on a series of annual reports from the Superintendency of Banks the government agency responsible for the regulation and oversight of the insurance industry This analysis was supplemented with in-depth interviews with representatives of the insurance and pre-paid health service organizations operating in the country

The following report describes the findings of these additional analyses The results offer a portrait of the evolution of the Ecuadoran health sector between 1984-1993 and the growing size and importance of the health insurance and prepaid health care markets in the country

§ This additional analysis was completed by John L Fiedler PhD as a component of *Initiatives* subcontract with the International Science and Technology Institute Inc (ISTI) Washington D C for the management of the *Private Sector Healthcare Services in Ecuador A National Survey of Private Health Facilities*

Health Care Service Provision Trends[1]



The health care system of Ecuador has made substantial improvements over the course of the past decade as indicated by (1) the total number of consultations provided (2) the consultation rate and (3) the coverage rate The pace of progress however appears to have plateaued as these measures have been virtually constant since 1990

Total Consultations

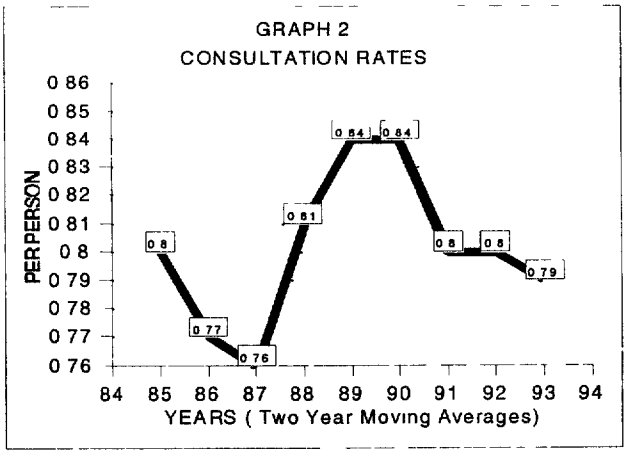
Graph 1 presents two year moving averages (TYMAs) for total consultations provided by the entire health sector of Ecuador — inpatient and outpatient facilities private and public subsectors — from 1984 through 1993 The graph maps out an elongated S with service provision totals relatively constant at both the beginning and the end of the period but with marked growth characterizing the middle years After averaging 7 15 million consultations from 1984-1987 the total number of consultations provided jumped by nearly 20 percent before stabilizing at an average of 8 48 million consultations in the 1990-1993 period

The Consultation Rate

The consultation rate is a commonly used indicator of the adequacy of service provision to a particular population The consultation rate is the average number of consultations per person per year According to World Health Organization (WHO) standards the consultation rate should be equal to 2 0 i e on average each person in a population should have two consultations annually

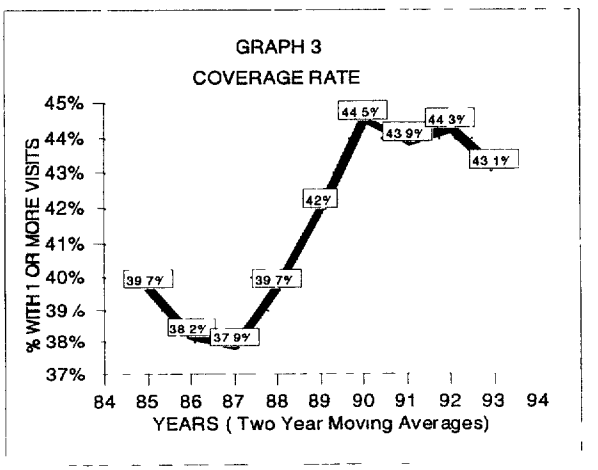
Graph 2 presents the TYMAs of the consultation rate in Ecuador for the period from 1984 to 1993 The consultation rate was relatively stable at about 0 80 throughout this period, with minor annual fluctuations In 1993 Ecuador s national consultation level was only 40 percent of the WHO standard falling far short of the WHO goal

The Coverage Rate



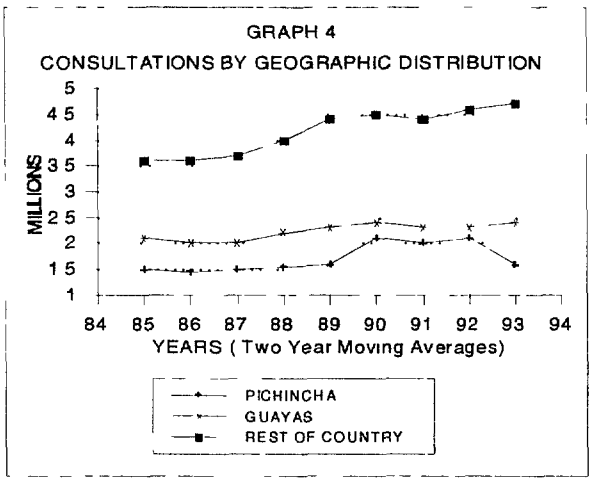
Another common indicator of the adequacy of service provision in a particular population is the coverage rate The coverage rate is the number of persons who have had at least one consultation in a particular time period divided by the total population The coverage rate is expressed as a percentage and can be interpreted as the proportion of the population that has accessed the health care system in a particular time period (usually a year) The INEC data do not allow precise quantifications of the coverage rate because they do not identify specific individuals However they do distinguish first visits for a particular illness from follow-up visits for the same illness This enables calculations of a measure that is somewhat closer to the coverage rate but to the extent that individuals obtain care for more than a single illness during a particular visit the coverage rate is overstated Still even with this shortcoming this measure provides useful information about the performance of the national health care system particularly when this measure can be tracked over time

Graph 3 maps the coverage rates of Ecuador s entire health sector using TYMAs for the 1984-1993 period The shape of the curve mapped out by plotting the TYMA coverage rates mirrors the plot of total consultations over the same time period an elongated 'S The coverage rate has increased between 1984-1987 and 1989-1993 from about 38 percent to about 44 percent This indicates that on average fewer than half of all Ecuadorans have at least one health care consultation annually



Geographic Variations in Total Consultations and the Consultation Rate

Graph 4 shows the annual geographic distribution of total health sector consultations in Ecuador during the 1984-1993 period (using TYMAs) The number of consultations provided in Guayas the province in which Guayaquil is situated increased slowly during the period Among the three geographic breakdowns reported in the graph Pichincha where the capital city Quito is located recorded the largest relative growth about 35 percent between the first three years of the period relative to the last three or four years The largest absolute growth in consultations took place in what is referred to in the graph

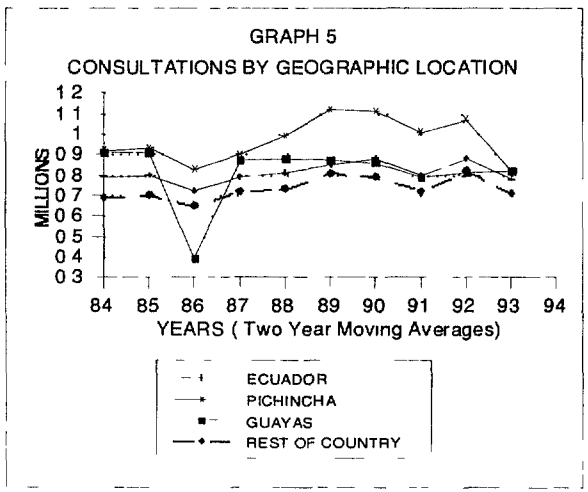


as the rest of the country," i e the 19 provinces in the country other than Guayas and Pichincha This indicates that the annual distribution of health care services in Ecuador has become more equitably dispersed geographically over the past decade

Graph 5 shows consultation rates for the entire country the provinces of Pichincha and Guayas and the other 19 provinces The average denizen of Pichincha is much more likely to have received care and to have received more care than inhabitants of the other three identified geographic domains After widening for several years in the late 1980s it appears that the differences between the geographic domains consultation rates have been narrowing since 1989-90 This indicator, too then suggests that the distribution of health care in Ecuador has become more equitable in the past few years

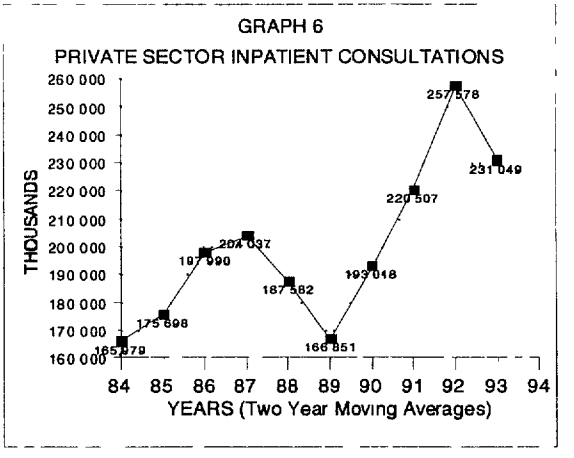
Care Provided by Inpatient Facilities

Table 1 shows the annual number of consultations provided by inpatient facilities in the public and private sectors from 1984 through 1993 Based on analysis of the annual INEC health facility surveys the level of care provided by the private sector clinics and hospitals (but exclusive of private physician offices which were not included in the survey s sample), grew from about 170 000 consultations a year in 1984-1985 to about 245 000 in 1992-1993 (See Graph 6) This represents an increase in the annual number of consultations of about 45 percent over the course of the past decade In contrast the public sector grew at about one-third this rate over the same period—by roughly 17 percent



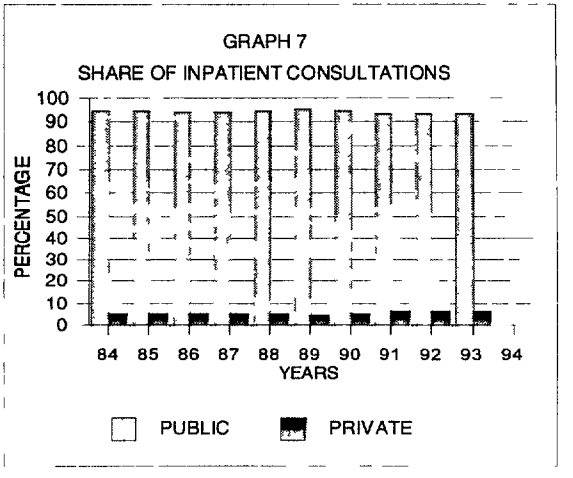
While the rate of growth of the private sector was much faster than that of the public sector the public sector nevertheless continued to dominate, providing roughly 95 percent of all consultations at inpatient facilities throughout the decade Although the public sector's provision of care increased at a much slower proportionate rate than did that of the private sector in absolute terms the increases in public sector-provided consultations far exceeded the increases posted by the private sector In fact the absolute increase in the average annual number of consultations provided by the public sector between 1984-1985 and 1992-1993 exceeded 500 000 more than twice the total number of private sector inpatient facility-provided consultations annually provided in 1992-1993 Hence while the private sector clinics and hospitals have been growing rapidly and are increasing their relative significance in the sector they remain a

relatively minor actor to date As Graph 7 shows despite the fact that the private sector s growth has been robust its share of all inpatient facility care has edged up only very slightly over the decade



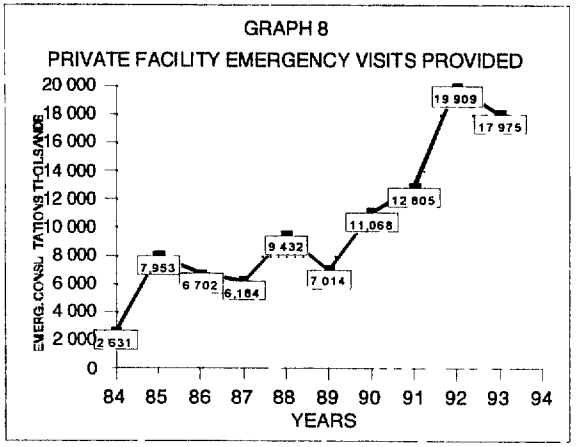
The growth that has been recorded by the private sector inpatient facilities service provision has not been steady In particular 1988 and 1989 marked years of substantial contraction and it was not until 1991 that the earlier growth trend was re-established and service provision came to exceed levels achieved earlier in the decade Given the private sector s slipping performance at the end of the 1980s (which coincided with a macroeconomic slump), the rapid growth in the 1991-1993 era when it posted all-time highs means that the annual pace of expansion in service provision was even faster than a comparison with the early 1980s would suggest The most rapid expansion occurred between 1989 and 1992 when private sector service provision jumped by 54 percent only to dip by 10 percent in 1993

Table 1 shows the changing composition of consultations provided by inpatient facilities The most rapidly expanding segment of the private sector clinics' and hospitals growth has been emergencies Graph 8 shows the evolution of emergency consultations provided by private in-patient facilities Whereas in 1984, emergencies and the acquisition of health certificates constituted only 2 percent of the total consultations provided by private inpatient facilities by 1992-93 they had increased in number by more than 600 percent (more than 12 times faster than total private inpatient institution consultations) and accounted for 8 percent of the total This expansion is probably attributable at least in part to the public perception that emergency care requires the more skilled higher quality care that is available in the private sector It may also be due in part to private sector services being generally more accessible in terms of their numbers location and hours of service Graph 9 shows the changing composition of inpatient facility services over the study period



Outpatient Facility-provided Consultations

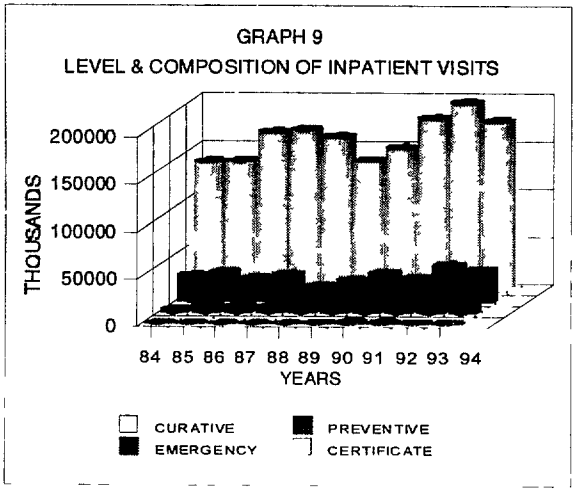
While the pace of expansion of the number of consultations provided at inpatient facilities from 1984-85 to 1992-93 was a brisk 17 percent the outpatient facilities surveyed by INEC increased the number of consultations they provided at an even faster pace in excess of 30



percent As a result, the proportion of all consultations that were provided at outpatient facilities expanded over the period from about 53 percent in 1984-86 to about 57 percent in 1991-93 (see Graph 10) Growth in the number of consultations provided by outpatient facilities has been particularly pronounced since 1988

The shift from inpatient-based to outpatient-based care that occurred during this period is probably understated by the INEC survey data There is other evidence (discussed below) which suggests that the number of outpatient facilities and particularly private sector outpatient facilities, (most importantly individual private physician practices) increased even more rapidly in the latter half of the 1980s further heightening this trend Thus the significance of the private sector as measured by the proportion of total care it provides increased substantially throughout the course of the decade Unfortunately we are unable to definitively state how much more it grew and how much more important it became as a provider of health care in Ecuador due to the lack of data about the private solo practices

The share of first consultations accounted for by inpatient facilities was substantially less than their share of total consultations probably a reflection of patients with more serious and complex cases seeking care at inpatient rather than outpatient facilities The share of first consultations which were provided at inpatient facilities fell throughout the decade from roughly 36 percent in 1984-85 to about 31 percent in 1992- 93 This may have been due to the increased availability (access) of outpatient facilities and/or the outpatient facilities increased resolution capability (or the public s perception of it having increased)

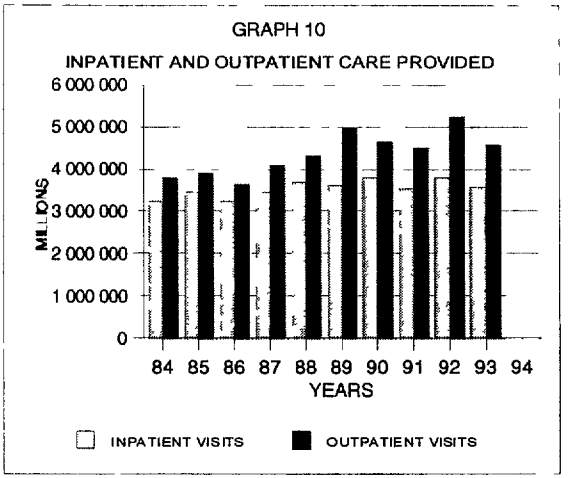


Curative Care Provision in 1993

Who is Providing it and Where It's Being Delivered?

In 1993 inpatient facilities delivered 49 9 percent of curative care and outpatient facilities provided 50 1 percent A review of Table 2 shows that the private sector accounts for only 12 percent of the annual total number of curative care consultations provided in Ecuador in 1991-1993 in the institutions included in the INEC survey The MOH accounts for one-half to two-thirds of all such care making it by far the most important single source

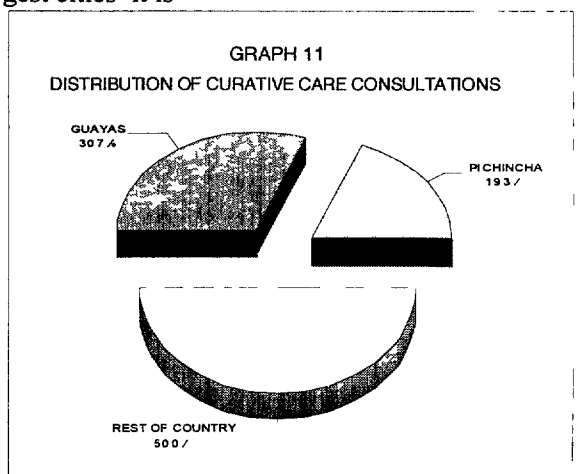
of curative care Among the other 6 segments of the public sector the other" category is the next largest nationally accounting for about 15 percent of total curative care consultations about 25 percent more than the private sector as a whole



Geographic Distribution of Curative Care Provision

Graph 11 shows the geographic distribution of curative care consultations in 1993 The province of Guayas with 26 percent of the national population had 31 percent of all curative consultations, while Pichincha province with 19 percent of all Ecuadorans had an equal share (19 percent) of curative care consultations That leaves the 19 provinces in the remainder of the country with 55 percent of the population having received 50 percent of the total curative care in 1993

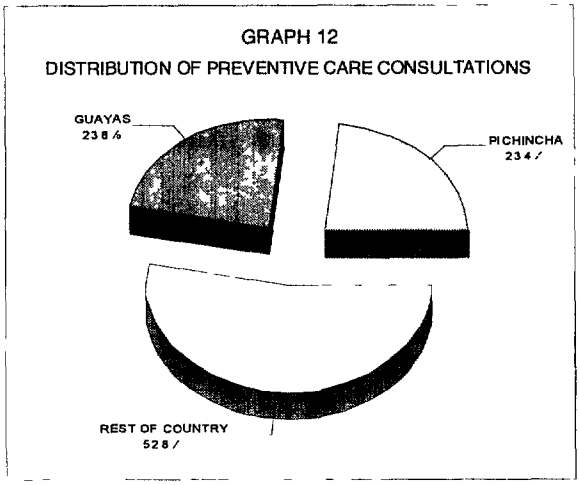
The private sector is relatively more important in Guayas than in Pichincha The private sector accounts for roughly the same proportion of the total curative care in Pichincha as it does in the country as a whole Annually the private sector accounts for 12 percent of all first curative care consultations and total curative care consultations However when the Pichincha and Guayas data are subtracted out of the national total we see that the relative significance of the private sector falls substantially, it accounts for only 9 to 10 percent of first visits and of total curative care consultations compared to 12 percent for Pichincha and about 18 percent for Guayas While Ecuador s private health sector is highly concentrated in its two largest cities it is relatively much more important in Guayas than it is in Pichincha accounting for 50 percent more of the curative care consultation market in Guayas vis-a-vis Pichincha



Curative Care Service Concentration

The private sector s concentration of services is lower than the public sector s as is reflected in the fact that the private sector s share of first consultations is greater than its share of total consultations While this is also true of the MOH it is proportionately much less so More of the people who obtain at least one consultation in the public sector have more than a single consultation This is especially true of persons using the Ministry of Defense SOLCA and other public sector providers

Without individual consumer/patient data it is difficult to ascertain what accounts for this pattern of utilization Private sector services are significantly more expensive than public sector ones which discourages utilization It may also be that the private sector is more commonly turned to for initial diagnosis (particularly for relatively severe ailments) but that in the event that follow-up care is required that the follow-up consultations are obtained in the public sector — perhaps because it is cheaper and/or more accessible Alternatively it may be that the ability of private sector providers to resolve health problems on average, is greater than that of public sector providers and as a result fewer private sector patients require follow-up visits



Preventive Care Provision in 1993

Who is Providing It and Where It s Being Delivered?

In 1993 26 percent of total preventive care consultations were provided by inpatient facilities The remaining 74 percent were provided by outpatient facilities

Throughout the world in developing and developed countries alike it is generally thought that the private sector does not provide adequate preventive care services The data in Table 1 — which show that preventive care accounts for 15 percent of total consultations — demonstrate that Ecuador is something of an exception in this regard (This is all the more true since this data is for inpatient facilities which generally provide substantially more curative than preventive care) Moreover, the private sector's share of preventive care increased substantially throughout the decade particularly after recovering from a temporary slip in 1986-1989

Geographic Distribution of Preventive Care Provision

As may be seen in Graph 12 in 1993 23 percent of all preventive care was provided in Pichincha (with 19 percent of the population) 24 percent was provided in Guayas (which has 26 percent of the population) and 53 percent of preventive care was provided to the rest of the country (55 percent of the population)

Trends in the Number and Composition of Human Resources

Table 3 presents data on the number of physician nurses nurses aides and total staff positions by subsector and organization Table 4 presents the annual distributions of each type of staff person by subsector and organization Between 1984 and 1992 the number of physician positions in Ecuador increased by 47 percent Most of this increase was absorbed by the Ministry of Health (MOH) and IESS the Ecuadorian Institute of Social Security, which together accounted for 58 percent of total physician positions in 1984 and 57 percent in 1992 In terms of relative growth, the private sector posted by far the largest gains, as it went from 26 percent of total physician positions in 1984 to 31 percent in 1992

For nearly all of the physician-staffed public sector facilities 1992 marked the zenith of an historical trend The following year there were widespread reductions in the numbers of physician positions in the public sector as the sector's share of total physicians fell by 12 percent The MOH suffered a 16 percent contraction, while IESS experienced a more modest 10 percent drop In the meantime, the private sector continued to grow, and indeed accelerated its pace of growth in 1993 The bulk of the growth in physicians in the private sector occurred in for-profit organizations which by 1993 constituted 92 percent of private sector health care organizations included in the annual INEC survey With the downsizing of the MOH and IESS most of the physicians pushed out of the public sector since 1992 have had little choice but to move into the private sector in order to continue practicing medicine The private sector apparently has not been able to absorb all of these physicians in 1993 the number of physician positions in the health sector of Ecuador as a whole fell by 5 percent

The number of physicians working in the private sector grew significantly in both absolute and relative terms over the decade under study The private sector s share of nurses and nurses aides grew at roughly the same rate leaving the private sector s disproportionately large share of physicians vis-a-vis its share of other types of staff virtually unchanged This reflects the fact that the private sector health care organizations are on average smaller and much more likely to be staffed by physicians with few support staff (Recall that these tables are based on INEC survey data which essentially exclude individual pri-

vate physician practices) If these practices were included, this already distinguishing characteristic of private vis-a-vis public practices would become much more pronounced

The number of full-time equivalent (FTE) physicians also fell in 1993 by 10 percent, roughly twice as fast as the number of physician positions Thus it may be inferred that there was an increase in the number of physicians working in part-time positions The number of physician positions per FTE went from 1 25 in 1990 and 1991 to 1 57 in 1993 an increase of 20 percent In 1993 the average physician position was a 0 64 full-time equivalent In 1993 the average physician had to have 1 57 positions in order to work full-time (40 hours per week)

The pattern characterizing the long-term evolution of physician positions in Ecuador likewise characterized the numbers of nurses nurses aides/auxiliaries and total personnel All experienced steady growth in their numbers until peaking in 1992 and actually falling in 1993 Nurses grew the most rapidly over the 1984-1992 period, more than doubling in number

As may be seen in Table 5 the proportion of total staff comprised of physicians nurses and nurses aides increased in the public sector and even more rapidly in the private sector over this period Whereas in 1984 these three types of personnel constituted 46 percent of total public health and 38 percent of total private health personnel by 1992, they represented 60 and 64 percent respectively The 1993 shakeout significantly reduced the proportion of physicians nurses and auxiliaries to 52 percent, a reduction of nearly twenty percent The private sector proportion, in contrast continued its upward march, nearing 68 percent in 1993 These long term trends reflect a growing reliance on care providers to perform all of the work in especially public health facilities

Given the very high proportions of total staff that these three types of health care providers constitute in both sectors, it is likely that the division of labor in the health sector has been constrained to the detriment of the efficiency of the sector as a whole The high numbers of physicians on staff and their growing number relative to all other staff suggests that they are increasingly doing things that other less expensive and less highly trained personnel could be doing So too with nurses and nurses aides The fact that this trend has continued in the private sector suggests that there is considerable capacity to increase service provision in that sector were it to reorganize the workplace and rationalize its work force It is likely that this is a reflection of considerable excess supply of physicians who by virtue of their large numbers relative to the numbers of clientele have the time to perform these other tasks

Staffing ratios throughout the public health sector improved considerably from 1984 to 1993 In 1984 the nurse physician ratio was 0 27 1 roughly the reciprocal of the 4 1 ratio that is a commonly regarded standard for a level of efficiency consistent with acceptable treatment and division of labor norms (but which also depends on case mix and other more minor, considerations) By 1993, this ratio had increased to 0 41 1, substantially better but still well below the standard

In the private sector the nurse physician ratio started from an even more abysmal level 0 10 1 and had only risen to 0 12 1 by 1993 Again this low nurse physician ratio reflects the existence of excess capacity and indicates the existence of considerable room to improve efficiency in the delivery of services — if demand were adequate

Estimating the Physician Service Capacity Utilization of the Health Sector

In order to gain a rough understanding of the magnitude of the physician service provision capacity of the Ecuadoran health care system it is necessary to look at the number of full-time equivalent (FTE) physicians in the system rather than the number of physician positions INEC s annual publication of the results of its annual survey reports the level of effort associated with physician positions in four broad categories (1) more than eight hours per day (2) from four to seven hours per day (3) less than four hours per day, and (4) on-call It was assumed that the average physician in each of these categories worked (1) 8 hours a day, (2) six hours per day, (3) 2 hours per day and (4) five percent of a day respectively

Table 6 presents the resulting estimated number of physician FTEs in the public and private subsectors by institutional affiliation Three of the 10 segments of the sector — the MOH, IESS and private, for-profit — account for 85 percent of the Ecuadoran health sector's total physician FTEs

Next, it was assumed that (1) a full-time physician works 40 hours per week for 48 weeks per year, (2) a physician can provide four consultations per hour and (3) that a physician devotes 75 percent of his/her time to direct service delivery (with 25 percent spent on set-up and administration) Based on these assumptions it was estimated that a full-time equivalent physician working at full capacity (and not limited by a shortfall demand) can provide 5 760 consultations per year These assumptions were used to translate the number of physician FTEs reported in Table 6 into the estimated service provision capacity of the health sector presented in Table 7

The next step was to quantify the number of physician-provided consultations by the provider's institutional affiliation and subsector The INEC annual publication has only reported consultations by the provider s institutional affiliation and subsector since 1991 Moreover the data reported by this breakdown are not without several shortcomings First the INEC publications report IESS data inclusive of the affiliated clinics the results for which are also reported as private sector services Given the aim of this work it was determined best to include the private sector data in the analysis which required excluding IESS (in order to avoid double counting)

Another INEC data-reporting problem is that the data presented in the annual report do not provide a comprehensive accounting of physician-provided consultations by institutional and subsectoral affiliation INEC s Tables 32, 33 and 34 report preventive care and OB-GYN consultations first curative care consultations and follow-up curative care visits, respectively No information is available however about the institutional affiliations of house-call providers, which number nearly one- half million annually This results in the under-reporting of physician consultations The magnitude of the under-reporting, however is not likely to be very significant for two reasons First the total number of house calls constitute only about five percent of the total consultations provided in the sector Second a large proportion of house calls are provided by non-physicians (nurses and nurses aides) reducing to well below 5 percent the proportion of total consultations those house calls that should be counted as physician consultations represent The vast majority of the house calls however are provided the MOH Thus to the extent that their non-inclusion under-reports physician consultations it is most likely to under-report MOH vis-a-vis other physicians consultations

A third data shortcoming is that the curative care consultations reported in INEC's Tables 33 and 34 include other than physician- provided consultations Here too, however, the resulting bias is not likely to be great Other tables in the annual publication enable one to cross-check the total number of physician-provided curative care consultations with the total number of all curative care consultations provided (by all provider types) Doing so one finds that physicians provide 94 1 percent of all curative care consultations This results in over-reporting physician-provided consultations and it is most likely to over-report MOH vis-a-vis other physicians service provision The fact that these two biases are relatively small and the fact that they are countervailing in terms of their impact (one over-counting the other under-counting) leads us to conclude that the resulting figures are acceptably close measures of physician-provided consultations to justify using these data in the development of an estimate of physicians service provision capacity by institutional and subsectoral affiliation

Table 8A presents the number of physician-provided consultations used in the derivation Table 8B presents estimates of physician service provision capacity utilization As noted in the table, the estimates of capacity utilization are calculated by dividing the number of physician-provided consultations (from Table 8A) by the number of physician FTEs (from Table 7) The results indicate that Ecuador s physicians are operating at less than one-quarter of their service provision capacity This finding is alarming Even if some of the assumptions made in deriving these estimates are altered fairly dramatically, the implied magnitude of inefficiency in Ecuador s health sector remains very high For instance if it is assumed that physicians spend only about one-third of their time in service delivery, service provision capacity utilization is still estimated to be less than half (46 percent) of its potential Alternatively, if it is assumed that physicians can only provide two consultations per hour (but continue devote 75 percent of their time to service delivery) then they are operating at 46 percent of their capacity

This analysis is highly simplified It does not take into account a number of factors that are likely to influence the inferences that might be drawn from these findings For instance, this analysis implicitly assumes that the case mix and severity of illnesses treated by different providers or subsectors are identical However if Ecuadorans turn more to the private sector for treatment of more serious illnesses then one would expect the average amount of time spent on a case to be higher in the private sector This in turn implies that the maximum capacity level of service provision would be lower in the private sector, and that the relative measures of the public vis- a-vis the private sector presented here are over-stated

Bearing in mind the limitations of this simple analytic tool it appears that the public sector in Ecuador is operating at a higher level of its service provision capacity i e that the public sector is operating more efficiently than the private The MOH is operating at slightly above the entire sector s average service provision capacity utilization level The least efficient public sector entity appears to be the Ministry of Defense and the least efficient private entity is the for-profit sector This subsector appears to be operating at only about 2 percent of its physician service provision capacity less than one-tenth that of the health sector as a whole

What might account for the observed differences in performance and in particular the private for-profit sector s poor showing? There are several possibilities

(1) the private sector has few incentives to report its service provision statistics accurately

(2) the private, for-profit sector reporting to INEC is made up principally of inpatient facilities, with relatively small outpatient units (and thus far fewer consultations per physician)

(3) the private sector may be providing a disproportionate amount of the care of more severe illnesses and cases which are more difficult to treat,

(4) the staffing patterns and/or division of labor within private practices may be such that physicians are doing many tasks that are done by nurses nurses aids or administrative personnel in the public subsector, and/or

(5) there may be considerable excess supply in the private sector, such that physicians do not have adequate demand (i e enough patients) to enable them to work at higher levels of capacity

The reductions in the number of public sector physicians that occurred in 1992, positively affected physician productivity, i e , the level of physician service provision capacity utilization Those same reductions, which are likely to have pushed more physicians into private practice, may have had an adverse impact on physician productivity in the private sector The capacity utilization of for-profit, private physician practices fell to its lowest point in 1993

Why might the for-profit private sector have such little demand, relative to its capacity to provide services? A definitive accounting would require a special study, but we can speculate (1) prices may be too high (or simply perceived by consumers as being too high) relative to public sector providers (2) a large portion of private sector providers may be poorly located requiring long travel distances (3) they may offer services at unpopular hours and/or (4) the availability of their services — type location, hours of service — may not be well known

The health sector of Ecuador and particularly the private subsector is operating very inefficiently as measured by the low level of productivity of physicians Rather than continuing to try to increase access and utilization of health care services by encouraging the development of physicians, it would be advisable to investigate how to improve the productivity of physicians throughout the entire sector

Trends in the Number and Composition of Health Facilities

Outpatient Facilities

Tables 9 and 10 contain information on the annual number and geographic distribution of outpatient health facilities by institutional affiliation and subsector from 1984 through 1993 The number of private sector outpatient facilities grew at a slightly faster pace than the number of public sector outpatient facilities (53 vs 50 percent) The absolute growth of the much larger public sector however dwarfed that of the private sector The increase in the number of public sector outpatient facilities over this decade was more than 20 times that of the private sector Despite the fact that the private sector grew faster over this entire decade private sector outpatient facilities still constituted only 5 percent of total outpatient facilities in 1993

Geographic Distribution of the Private Sector

In 1984, private sector outpatient facilities were disproportionately concentrated in Guayas province which accounted for 37 percent of all such facilities Over the decade this concentration fell slightly By 1993 the percentage of private outpatient facilities located in Guayas had slipped to 32 percent The proportion of all private outpatient facilities in Pichincha province fell over this period as well from 20 percent in 1984 to 15 percent in 1993 While the proportion of private outpatient facilities in Guayas and Pichincha fell the absolute number of these facilities continued to grow in both provinces At the same time, the rest of the country experienced greater growth in terms of both absolute and relative numbers of private outpatient facilities The number of private outpatient facilities in provinces other than Pichincha and Guayas grew from 38 to 71 i e by 87 percent from 1984 to 1993

Variations in Structure of Different Geographic Markets

In 1984 the private sector outpatient facilities constituted a relatively minor segment of the outpatient market throughout most of Ecuador In Pichincha in the 19 provinces other than Pichincha and Guayas and nationwide private outpatient facilities accounted for only 3 or 4 percent of all outpatient facilities In contrast in Guayas province they constituted 13 percent of all outpatient facilities By 1993 although the share of the private sector in Guayas had decreased to 11

percent, Guayas still remained an aberration the sole province in which the proportion of all private outpatient facilities was significantly more than throughout the remainder of the country

Inpatient Facilities

Tables 11 and 12 contain information on the number and geographic distribution of inpatient facilities by subsector in 1984 and in 1993 The total number of inpatient facilities grew by 28 percent over this period, and they came to be increasingly dominated (numerically) by the private sector Public sector inpatient facilities grew by only 8 percent between 1984 and 1993 compared with the private sector s 47 percent Whereas in 1984 the composition of inpatient facilities was nearly half public and half private, but by 1993 it was 60 percent private

These figures are somewhat misleading in terms of what they mean for service delivery capacity since they do not take into account the great variation in the average size of a public and a private inpatient facility The average public hospital has four times more beds in it than the average private hospital Thus while there has been relatively rapid and significant growth in the number of private inpatient facilities relative to the public sector over this decade due to the much larger size of the average public facility, Ecuador's hospital beds remained overwhelmingly public sector

As was found to be the case with private outpatient facilities the traditional structure of the inpatient facility market is changing Inpatient facilities have long been and remain, disproportionately concentrated in Guayas Over the past decade, however, there has been significant erosion in the relative importance of the private inpatient sector in Guayas and to a lesser extent in Pichincha Whereas in 1984 35 percent of all private sector inpatient facilities were in Guayas, with another 20 percent in Pichincha By 1993 the degree of concentration of the Ecuador private inpatient facilities in these two geographic markets had fallen considerably The private sector had begun to move more rapidly into other provinces and into cities other than Quito and Guayaquil In 1993 despite growth in the absolute number of private inpatient facilities in Guayas the percent of all such facilities in this province had fallen from 35 to 27 percent

Over the same time period the absolute number of private inpatient facilities grew and their share of the Pichincha market increased from 20 to 25 percent Between 1984 and 1993 in Pichincha and throughout the remainder of the country the composition of the inpatient sector became increasingly dominated (numerically) by private facilities Only in Guayas province did the private sector's share of inpatient facilities slip over this period Moreover the relative importance numeri-

cally of the private sector in Pichincha surpassed that of Guayas (74 vs 64 percent) while the composition of the inpatient sector nationally came to look increasingly like that of Guayas

The proportion of these changes which can be attributed to the market and changing market signals is exceedingly difficult to assess without additional information Did for instance individuals interested in establishing a private inpatient facility avoid Guayas because of the relatively large number of these facilities already in operation there and the existence of excess capacity (or excess supply)? And if so did thee conditions result in greater competition for relatively scarce patients? Did enterprising physicians choose increasingly to go elsewhere where there was less competition and relatively more patients without regular sources of private care? While it appears that these factors played a role in the changing geographic concentration of the private market and in changing the composition of the Pichincha and Guayas markets the magnitude of these influences in shaping the development of the inpatient market in Ecuador cannot be ascertained without additional information

Assessing the Impact of the INEC Survey Biases on the Health Sector Trend Analyses

The INEC survey provides information about physician positions for a variety of different types of facilities but does not cover self-employed private physician s office practices How numerically important are these small scale operations in Ecuador? Or in other words, how significant is the limited coverage of INEC's survey? Without a very costly and time-consuming all-inclusive survey, it is difficult to assess There are, however some supplementary databases and special reports that cast some light on the magnitude of the bias and thereby provide a better understanding of the nature of the physician labor market, and, more generally, of the size and current dynamics of the individual physician practice segment of the health care resources market

Numbers of New Physician and Nurse Graduates Relative to the Changing Numbers of Physician and Nurse Positions

Tables 13 and 14 contain the number of new nurse and physician graduates and the number of newly created positions for nurses and physicians The data on graduates was compiled from the 12 universities with health manpower training programs The number of newly created positions is from the INEC annual survey The differences between the numbers of graduates and the number of positions created is also reported in the table and is labeled as the excess" number of physicians or nurses produced annually The term 'excess is used loosely here it is not meant to imply that there exists any absolute redundancy in the physicians' or nurses' labor market such that these persons are unemployed and not providing any professional services Rather as used here, excess indicates a net addition to (i e growth in) the number of physicians in private sector practices and especially those types of arrangements least covered by the INEC survey viz solo practices

Table 13 shows that in eight of the nine years between 1982 and 1990 the number of physician graduates exceeded the number of physician positions and exceeded it by a substantial amount — nearly threefold — over the entire period This suggests that the number of physicians who either were forced to enter a solo private practice or did not practice at all, was nearly twice the number that took positions with institutional providers In short the private sector and in particular private

solo practices were the most rapidly expanding portions of the physician market during the 1980s

Nurse Positions and Nurse Physician Ratios

Table 14 shows that the nurses labor market followed a somewhat similar pattern of development during this period In seven of the nine years between 1982 and 1990, the number of nurse graduates exceeded the number of nurse positions created The amount by which the number of graduates exceeded the number of new positions however was only 14 percent over the entire period Thus while the excess number of nurses who were available to enter the private sector was positive it was fairly modest and markedly less than was the case of physicians

Moreover, the ratio of the absolute number of excess physicians to the absolute number of excess nurses over the period was 20-to-1 While we have no information about the total number of nurses and physicians in small private practices at the beginning or end of the period, it is clear that the dynamics of this period contributed to the further skewing of the physician nurse ratio which has long been disproportionately large throughout the rest of the health sector — in both the public and the private sub-sectors Furthermore in absolute terms the number of physician positions created exceeded that of nurses by 60 percent further exacerbating the physician-nurse ratio

Characteristics of Physician Work Sites INEC vs Census Data

Table 15 presents information about the composition of physician positions in Ecuador in 1990 The source of this comprehensive cross-sectional data is the 1990 census which contained several detailed questions about the characteristics of the work site of physicians Of the total of 14 819 physicians reported in the country at that time only 41 percent worked in the public sector (for either Central Government dependencies or municipal health services) leaving 59 percent who work in the private sector A bit more than half of the private sector physicians work for a company or business which employs one or more employees about one-third work for private companies while the remaining 14 percent are self-employed and work completely by themselves i e work in solo practices with no support staff

In contrast the INEC annual survey data for 1990 indicate that twice as large a proportion 80 vis-a-vis 41 percent of physicians work in the public sector While the INEC data reflect the fundamental trend in the changing composition of the health sector — namely the growing relative size of the private vis-a-vis the public health subsector — this finding suggests that it substantially under-reports the magnitude of that shift

Whereas the 1990 INEC data indicate that there were 9 785 physician positions in 1990 the census data report 15 540 Thus the INEC survey appears to report less than two-thirds (63 percent) of all physicians for 1990 This under-reporting of physicians results in an under-reporting of total health sector consultations as well How much so is difficult to say although the survey of private health facilities in Ecuador conducted by *Initiatives* in 1995 provides some insight in this regard While it is probable that there is some under-reporting in both the private and the public subsectors and it is known that in any given year of the INEC survey there is a considerable proportion of non-responses/missing responses to the various questions about the level of service provision it is likely that most of the under-reporting involves the smallest scale private sector providers The *Initiatives* survey data would seem to indicate however that these are by far the least productive types of health services in Ecuador On average they produce an average of 495 consultations per year, just 7 percent of the level of the average health provider Assuming the relative proportions are the same in 1990, we can estimate that the non- reported 5 747 individual physician practices provided roughly 2 84 million consultations in 1990 and that their exclusion had resulted in an under-reporting of 33 percent of all consultations The INEC survey reports only 14 percent of private sector consultations If the 1990 INEC data are supplemented with these estimates the private sector s share of total consultations provided in Ecuador can be estimated at 29 percent (compared to the INEC-only-data-based estimate of 6 percent) The changes in the health care market that have occurred in Ecuador since 1990 (discussed earlier) suggest that the private sector s growth has accelerated since then At present the private sector probably accounts for about one-third of all consultations

Taking into account the magnitude of INEC s under-reporting of the entire health sector's performance means that the performance measures discussed earlier are significantly understated as well The consultation rate is closer to 1 1 rather than the 0 8 noted In addition depending upon trends characterizing this segment of the health care market, it may very well be that the plateauing performance of the Ecuadoran health sector as captured in INEC data since about 1990 might be exaggerated or might not even be occurring As already noted it is likely that the downsizing of the public sector that has occurred since 1992 has accelerated growth of the private sector It has most probably resulted in a rapid proliferation in the number of individual private physician practices Thus what appears from INEC data to be a plateau is more likely continued growth in the sector but of that segment of the sector not included in the INEC survey Rather than plateauing it is likely that the most important trend characterizing Ecuador's health care system in the last few years has been a type of de facto privatization of the sector the private sector — and particularly

single physician practices — has probably been growing much more rapidly than the rest of the sector In effect health care is becoming increasingly privatized in Ecuador This interpretation is also consistent with the rapid growth in private prepaid health care organizations that has occurred (especially in Quito, but other major cities as well) in the last three or more years

An important characteristic of the physician labor market that is masked by INEC s focus on positions (as opposed to FTEs) is that many physicians work in more than one institution or practice Thus the number of physicians employed is considerably less than the number of positions available, but how much less cannot be determined without additional information While calculating and comparing numbers of FTEs and numbers of positions provides some insight into critical aspects of physicians' work patterns and careers, the absence of information on the number of positions that physicians hold precludes a thorough understanding of the nature of the physician labor market

Data on Sources of Care from INE National Survey

According to data collected in the 1991 National Institute of Employment (Instituto Nacional de Empleo INE) survey 46 percent of the national population reported obtaining its health care from a private clinic or a private physician's office Not surprisingly the survey data showed the rate of private sector coverage to be more, about one-third more in urban areas relative to rural areas In urban areas the number of persons who sought care from these private sector arrangements was 2 2 times more than the number turning to the MOH In rural areas the MOH covers 0 4 percent more persons but nationally the private clinics and private physician practices cover 36 percent more of the population than the MOH and 18 percent more than the MOH and social security combined

The INE survey also dispelled some of the common misconceptions about the composition of private sector clientele and services (which the *Initiatives* survey findings further underscore) Conventional wisdom in Ecuador holds that the private sector provides very few primary health care services focussing its efforts primarily on providing curative care to adults The INE survey revealed however that private clinics and private physicians offices nationwide were cited as having provided care to 5 percent more of the national population of children less than 5 years of age than had the MOH Moreover in response to the survey question about where the last case of diarrhea and the last acute respiratory illness (ARI) of children in the household were treated virtually equal numbers of respondents reported that the diarrhea was treated in private vis-a-vis an MOH facility and 42 percent reported they had sought treatment for ARI in a private facility compared to 37 percent who reported having gone to the MOH

The Private Health Insurance Industry in Ecuador

The source of data for the information presented in this section is the annual report of the Superintendency of Banks, *Boletin de Seguros* The Superintendency is a government agency and is charged with regulating and supervising banks and insurance companies Its role vis-a-vis insurance companies is analogous to that played by state insurance commissions in the United States

Insurance companies must be authorized by the Superintendency to establish an office in Ecuador as well as to sell specific types of insurance The Superintendency monitors the financial status of the private companies In this capacity it requires that private companies maintain a specified level of reserves (of their insurance premium revenues) in a set-aside account to ensure that the company will be able to meet its claims obligations Furthermore, the Superintendency levies a charge (which it refers to as a right of emission' levy) on all insurance companies to defray its own operating expenses The levy is equal to five percent of the value of the premium This levy puts the traditional indemnity insurance companies at a competitive disadvantage vis-a-vis prepaid schemes which have no such similar costs In addition each company is required to submit a detailed annual financial report to the Superintendency To ensure the veracity of the annual reports, the Superintendency periodically audits each company In the past few years, the growing shortage of Superintendency staff has reduced the frequency of audits Any particular insurance company audit is now conducted once every two to three years

An issue of growing importance in Ecuador concerns the domain of the Superintendency The Superintendency is responsible for monitoring only traditional insurance plans — i e third party indemnity plans It has not been charged with overseeing the operations of prepaid health insurance schemes which are far and away the most dynamic segment of the industry Indeed, representatives of two third party indemnity plans who were interviewed in the course of this study decried what they regarded as the Government s dualistic approach and both felt strongly that their having to adhere to the Superintendency s rules and regulations put them at a severe competitive disadvantage relative to the prepaid schemes Both company representatives claimed that their companies had lost a significant portion of their health insurance business in the past year to prepaid schemes

(HUMANA and in particular SALUD) precisely because of the non-regulated nature of the non- traditional schemes

According to one of the private company representatives and a recent report prepared by Grupo Seguros for SEGURANZA Cia Ltd Analisis Comentarios y Conclusiones sobre las Polizas de Seguros en Group do Asistencia Medica y los Contratos de Prestacion de Servicios Medicos Prepagados the fact that the seed capital and organizational impetus came from abroad — Chile and Colombia — was a cause for concern The Ecuadoran private insurance company representative and the aforementioned report both maintain that prepaid organizations are undesirable because (1) they are alien to Ecuador, (2) they have already proven to have had undesirable effects on the private health care sector in Chile, Peru Colombia and Argentina and (3) they are essentially unregulated business ventures Since they were not monitored by the Superintendency and had no reserve requirements — they could leave the country at any moment without any assurance that the company would honor its commitments In sum according to these two Ecuadoran private health insurance industry sources prepaid arrangements not only constituted unfair competition but they put the insured at risk and are likely to have a negative impact on the structure of the private health care system in Ecuador

From interviews with the two chief economists with the Superintendency it was learned that the agency is well aware of this criticism The economists noted however that the Superinten ncy had not received any directives concerning what to do about these new structures They also pointed out that if the Superintendency had adequate resources they would be inclined to take the initiative and to begin investigating what they thought might be their appropriate role vis-a-vis these new structures They lamented however that the Superintendency s resources have been declining in the past few years Owing to both of these considerations the Superintendency is not planning on taking any initiative to begin working in this new area

Measures of the Importance of Private Health Insurance in Ecuador

Table 16 presents a listing of private insurance companies that have been authorized by the Superintendency of Banks to sell health insurance in Ecuador by year for the 1986-1993 period The table also provides information on the number of national foreign and mixed (national and foreign) companies operating in Ecuador (Some of the data are only presented for the 1990-1993 period due to a major revision in the structure and content of the Superintendency s annual report which was introduced in 1990)

Since 1990, there have been about 30 insurance companies registered with the Superintendency and operating in Ecuador About two-thirds of these companies have been national in nature the remaining one-third being foreign owned Roughly 30 percent of national companies have been authorized to sell health insurance compared to about 60 percent of foreign companies The much lower proportion of national companies that have been authorized to sell health insurance probably reflects a lower level of interest in entering into this specific product line due to its generally more demanding actuarial requirements and its much greater financial risks Information constitutes a barrier discouraging entry into this market It is common for foreign owned health insurance companies operating in developing countries to rely on their home office (usually based in the U S U K or Canada) for actuarial analysis of health care utilization rates (probabilities) which are then used to derive premiums In contrast, national companies do not have the luxury of access to this information and are reluctant to incur the relatively high costs of developing and maintaining the requisite database As a result their premiums are set less on the basis of sound actuarial analysis and more on the basis of informed speculation, resulting in greater financial risk

Only nine of the 30 insurance companies authorized to sell some type of insurance in Ecuador are also authorized to sell health insurance However, only three of these nine actually do so

Table 17 reports the annual net health insurance premiums (in thousands of nominal Sucres) paid to companies supervised by the Superintendency of Banks from 1978 to 1993 After a relatively slow start the health insurance industry has posted generally increasing (nominal) levels of net premium collections Over the 1982-1993 period only once — in 1992 — did the level of health insurance premiums decline Furthermore, only in one other year 1985, were net health insurance premiums negative

To provide some insight into the insurance companies' perception of the significance of health insurance products within their general insurance portfolios Table 17 also provides information on the net premiums of all insurance and presents the net premiums of health as a percent of the net premiums generated by all insurance As is readily evident by the very small percentages reported in the right-hand column of Table 17 — annually averaging less than one-tenth of one percent — while health insurance s performance has been overwhelmingly positive it constitutes an insignificant portion of the general insurance portfolio of insurance companies in Ecuador

The trend however has been that health insurance is of growing importance Exclusive of 1985 there appear to have been 3 distinct eras within the health insurance industry in terms of the growing relative importance of health In 1978-1982 net health insurance premiums

annually averaged 0 01 percent of the net premiums reported for all insurance In 1983-1989 this proportion quadrupled to 0 04 percent and in 1990-1993 it more than quadrupled growing to 0 165 percent While of growing importance health insurance remains an insignificant part of the portfolio of insurance companies

Table 18 contains information about payments of insurance claims for just health and for all insurance from 1978 to 1993 As with the analysis of net premiums, the aim here is to understand both trends over the past 16 years as well as to assess the significance of the health insurance within the general insurance portfolio From the early 1980s until 1992 there was a long term trend of erratic but increasing health insurance claims payments Claims payment growth (in nominal terms) annually averaged 259 percent between 1982 and 1992 This trend was decisively broken in 1993 when health insurance claims payments fell dramatically from 473 million Sucres to 299 million Sucres, a drop of 37 percent The fact that net premiums continued to grow in 1993 while net health insurance claims fell so precipitously suggests that health insurance suddenly became much more profitable (although it should be recognized that administrative costs are not taken into account here)

At its peak, in 1992, the private health insurance was financing 473 million Sucres of health care Thus while health insurance still did not constitute a significant portion of the insurance portfolio of private companies, it had become relatively important as a source of financing for health care in Ecuador

Conclusion

The analysis of the evolution of Ecuador s health care system during the period 1984-1993 indicates a substantial increase in the size and complexity of its operations and financing However this progress appears to have stalled in recent years leaving service coverage and utilization at unacceptably low levels

The health care system has made substantial progress in the adequacy of its service delivery performance over the course of the past decade registering increases in the number of consultations provided by all types of facilities both public and private Coverage does remain low however, with less than half of the population having, on average at least one health care consultation in a year The geographic distribution of these services has become more equitable since the mid-1980s with the largest absolute and relative growth in consultations taking place in the 19 provinces other than those in which Guayaquil and Quito are located The growth in the number of private sector physicians and clinics and hospitals was particularly rapid during the past decade although in terms of the absolute number of consultations the public sector continued to dominate Ecuador s health care system

Utilization of the health care system s increased capacity however, is relatively inefficient An analysis of physicians' delivery of services indicates that Ecuador s physicians are operating at less than one-quarter of their service provision capacity, with the public health care sector operating more efficiently than the private The analysis suggests that rather than relying on increasing the number of physicians to improve the accessibility and utilization of health care services increased attention should be given to investigating ways to improve the productivity of physicians throughout the entire healthcare system

Health insurance as a source of financing for health care in Ecuador has also grown in importance over the course of the past decade although it does not constitute a significant portion of the insurance portfolio of private companies Less than one-third of the general insurance companies in Ecuador have been authorized to sell health insurance and only one-third of these actually do The more demanding actuarial requirements and financial risks associated with health insurance may be responsible for the low level of interest in this product

line among national insurance firms Nevertheless private health insurance is increasing in importance as a source of health care financing in Ecuador

[1] A common approach to analyzing trends in health care utilization is to use two-year moving averages rather annual observations Two year moving averages smooth out what can at times be wildly oscillating numbers from one year to the next thereby making it easier to discern long term trends This section relies primarily on TYMAs rather than annual service provision totals are reported to facilitate trend analysis

Tables

TABLE 1
TOTAL CONSULTATIONS PROVIDED BY INPATIENT FACILITIES
(PREVENTIVE CURATIVE EMERGENCIES AND HEALTH CERTIFICATES)

	PUBLIC SECTOR				PRIVATE SECTOR CLINICS AND HOSPITALS	HEALTH SECTOR INPATIENT FACILITIES TOTAL
	GENERAL HOSPITALS	CANTON HOSPITALS	SPECIALTY HOSPITAL ACUTE	SPECIALTY HOSPITAL CHRONIC		
TOTAL CONSULTATIONS						
1993	1 512 330	1 248 370	411 867	181 224	231 049	3 584 840
1992	1 559 917	1 284 494	523 617	175 490	257 578	3 801 096
1991	1 565 428	1 114 679	499 034	132 870	220 507	3 532 518
1990	1 686 697	1 256 434	528 587	154 159	193 018	3 818 895
1989	1 632 960	1 182 208	494 878	136 668	166 851	3 613 565
1988	1 634 610	1 238 211	479 257	148 185	187 582	3 687 845
1987	1 493 740	1 172 432	478 876	130 485	204 037	3 479 570
1986	1 451 044	1 096 801	371 504	132 300	197 990	3 249 639
1985	1 534 868	1 221 563	380 483	138 493	175 698	3 451 105
1984	1 406 421	1 162 649	386 196	117 277	165 979	3 238 522
CURATIVE CARE CONSULTATIONS (PRIMERAS + SUBSECUENTES EXCLUSIVE OF EMERGENCIES)						
1993	953 023	552 867	219 868	173 993	178 808	2 078 559
1992	1 065 243	544 383	270 380	173 599	198 077	2 251 682
1991	998 979	493 905	238 407	131 698	181 414	2 044 403
1990	1 133 680	605 985	287 425	152 066	150 329	2 329 485
1989	1 085 696	585 286	276 822	136 019	136 522	2 220 345
1988	1 055 300	600 576	256 889	141 065	161 982	2 215 812
1987	1 030 468	593 556	263 034	129 818	169 124	2 186 000
1986	1 066 874	536 803	246 142	122 205	166 872	2 138 896
1985	1 003 940	628 618	245 715	137 756	136 075	2 152 104
1984	951 105	598 223	264 643	111 661	135 842	2 061 474
PREVENTIVE CARE CONSULTATIONS (PRIMERAS + SUBSECUENTES EXCLUSIVE OF HEALTH CERTIFICATES)						
1993	130 602	237 521	104 233	3 255	33 588	509 199
1992	130 031	234 622	148 610	353	38 588	552 204
1991	110 164	171 600	137 582	129	24 910	444 385
1990	116 362	218 373	114 170	442	29 796	479 143
1989	118 848	209 496	108 440	644	22 683	460 111
1988	119 307	219 275	86 258	562	16 168	441 570
1987	119 673	208 533	78 571	667	28 729	436 173
1986	100 260	187 579	41 152	641	24 416	354 048
1985	108 275	194 006	79 141	691	31 223	413 336
1984	97 255	193 965	71 466	10	27 229	389 925

TABLE 1 (Cont d)
TOTAL CONSULTATIONS PROVIDED BY INPATIENT FACILITIES
(PREVENTIVE CURATIVE EMERGENCIES AND HEALTH CERTIFICATES)

	PUBLIC SECTOR				PRIVATE SECTOR CLINICS AND HOSPITALS	HEALTH SECTOR INPATIENT FACILITIES TOTAL
	GENERAL HOSPITALS	CANTON HOSPITALS	SPECIALTY HOSPITAL			
	EMERGENCIES	EMERGENCIES	ACUTE EMERGENCIES	CHRONIC EMERGENCIES	EMERGENCIES	EMERGENCIES
EMERGENCIES						
1993	423 450	402 404	86 408	3 917	17 975	934 154
1992	356 435	449 806	103 359	1 533	19 909	931 042
1991	446 283	397 087	122 440	172	12 805	978 787
1990	426 051	368 464	122 002	234	11 068	927 819
1989	421 081	327 156	105 020	5	7 014	860 276
1988	452 891	353 821	131 062	0	9 432	947 206
1987	335 902	304 232	137 219	0	6 184	783 537
1986	274 667	306 553	81 331	0	6 702	669 253
1985	412 926	320 806	52 096	28	7 953	793 809
1984	353 542	306 268	41 018	5 410	2 631	708 869
CERTIFICATIONS						
1993	5 255	55 578	1 358	59	678	62 928
1992	8 208	55 683	1 268	5	1 004	66 168
1991	10 002	52 087	605	871	1 378	64 943
1990	10 604	63 612	4 990	1 417	1 825	82 448
1989	7 335	60 270	4 596	0	632	72 833
1988	7 112	64 539	5 048	6 558	0	83 257
1987	7 697	66 111	52	0	0	73 860
1986	9 243	65 866	2 879	9 454	0	87 442
1985	9 727	78 133	3 531	18	447	91 856
1984	4 519	64 193	9 069	196	277	78 254

TABLE 2
CURATIVE CARE CONSULTATIONS
BY PROVIDER ORGANIZATION AND GEOGRAPHIC AREA
(ALL FACILITIES)

PROVINCE OR REGION	PUBLIC SECTOR								PRIVATE SECTOR			HEALTH SECTOR TOTAL
	MOH	DEFENSE	GOB Y POL Y BIENESTA	IESS	MUNICIPALITIES	SOLCA	OTHERS	TOTAL	FOR PROFIT	NON PROFIT	TOTAL	
1993												
PICHINCHA	503 642	182 131	25 221	82 930	68 067	59 107	78 125	999 223	80 226	26 526	106 752	1 105 975
GUAYAS	733 898	124 755	68 091	12 286	37 217	75 564	302 879	1 354 690	28 476	243 296	271 772	1 626 462
REST OF REP	1 809 753	77 843	32 769	26 654	36 494	12 009	473 728	2 469 250	74 294	183 713	258 007	2 727 257
REPUBLIC	3 047 293	384 729	126 081	121 870	141 778	146 680	854 732	4 823 163	182 996	453 535	636 531	5 459 694
1992												
PICHINCHA	705 814	177 556	66 960	77 291	47 006	51 980	82 530	1 209 137	145 103	34 450	179 553	1 388 690
GUAYAS	720 169	127 607	103 529	12 255	26 373	62 569	247 077	1 299 579	28 649	173 804	202 453	1 502 032
REST OF REP	2 207 878	112 805	42 340	26 435	12 578	10 941	393 071	2 806 048	73 130	244 952	318 082	3 124 130
REPUBLIC	3 633 861	417 968	212 829	115 981	85 957	125 490	722 678	5 314 764	246 882	453 206	700 088	6 014 852
1991												
PICHINCHA	624 468	186 523	57 099	45 933	36 753	41 460	189 443	1 181 679	140 127	31 203	171 330	1 353 009
GUAYAS	557 677	157 589	52 517	20 514	34 828	41 229	311 107	1 175 461	28 770	211 391	240 161	1 415 622
REST OF REP	1 866 075	135 321	30 150	24 489	4 106	10 742	456 103	2 526 986	169 009	115 736	356 062	2 883 048
REPUBLIC	3 048 220	479 433	139 766	90 936	75 687	93 431	956 653	4 884 126	247 834	429 647	677 481	5 561 607

TABLE 2
CURATIVE CARE CONSULTATIONS
BY PROVIDER ORGANIZATION AND GEOGRAPHIC AREA
(Continued)

PROVINCE OR REGION	PUBLIC SECTOR								PRIVATE SECTOR			HEALTH SECTOR
	MOH	DEFENSE	GOB Y POL Y BIENESTA	IESS	MUNICIPALITIES	SOLCA	OTHERS	TOTAL	FOR PROFIT	NON PROFIT	TOTAL	TOTAL
1993												
PICHINCHA	46%	16 %	2%	7%	6%	5%	7%	90%	7%	2%	10%	100%
GUAYAS	45%	8 %	4%	1%	2%	5%	19%	83%	2%	15%	17%	100%
REST OF REP	66%	3 %	1%	1%	1%	0%	17%	91%	3%	7%	9%	100%
REPUBLIC	56%	7%	2%	2%	3%	3%	16%	88%	3%	8 %	12%	100%
1992												
PICHINCHA	51%	13 /	5%	6%	3%	4%	6%	87%	10%	2%	13%	100%
GUAYAS	48%	8 %	7%	1%	2%	4%	16%	87%	2%	12%	13%	100%
REST OF REP	71%	4%	1%	1%	0%	0%	13%	90%	2%	8%	10%	100%
REPUBLIC	60%	7%	4%	2%	1%	2%	12%	88%	4%	8%	12%	100%
1991												
PICHINCHA	46%	14 %	4%	3%	3%	3%	14%	87%	10%	2%	13%	100%
GUAYAS	39%	11 /	4%	1%	2%	3%	22%	83%	2%	15%	17%	100%
REST OF REP	65%	5%	1%	1%	0%	0%	16%	88%	6%	4%	12%	100%
REPUBLIC	55%	9 /	3%	2%	1%	2%	17%	88%	4%	8%	12%	100%

GOB Y P Y BIENES MINISTRY OF GOVERNMENT POLICE AND THE MINISTRY OF SOCIAL WELLBEING

TABLE 3
PERSONNEL WORKING IN HEALTH FACILITIES (ALL TYPES OF FACILITIES)

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	DE-FENSE	GOB Y POL Y BIENEST	IESS	MUNICI-PALITY	SOLCA	OTHERS	TOTAL	FOR-PROFIT	NON-PROFIT	TOTAL	HEALTH SECTOR TOTAL
PHYSICIANS												
1993	3 560	448	311	2 766	95	114	499	7 793	4 002	354	4 356	12 149
1992	4 254	572	342	3 076	97	95	448	8 884	3 627	342	3 969	12 853
1991	4 087	560	269	2 605	99	89	473	8 182	3 704	319	4 023	12 205
1990	3 866	555	226	2 631	84	66	444	7 872	1 606	307	1 913	9 785
1989	3 669	491	215	2 649	66	85	448	7 623	2 479	301	2 780	10 403
1988	3 364	559	225	2 554	69	88	437	7 296	3 133	290	3 423	10 719
1987	3 263	557	222	2 373	59	48	435	6 957	2 668	276	2 944	9 901
1986	3 269	521	197	2 238	49	55	405	6 734	2 857	244	3 101	9 835
1985	3 273	529	182	2 186	42	56	599	6 867	2 306	241	2 547	9 414
1984	3 048	538	175	2 048	40	45	584	6 478	2 048	216	2 264	8 742
NURSES												
1993	1 635	184	42	1 001	52	62	207	3 183	470	42	512	3 695
1992	2 176	209	105	946	50	16	162	3 664	515	36	551	4 215
1991	2 095	208	61	818	41	17	142	3 382	491	32	523	3 905
1990	1 880	202	23	768	35	17	143	3 068	441	37	478	3 546
1989	1 691	191	21	673	40	14	142	2 772	414	27	441	3 213
1988	1 537	198	25	652	27	3	126	2 568	412	32	444	3 012
1987	1 365	193	25	661	23	4	112	2 383	353	35	388	2 771
1986	1 218	183	17	606	20	5	105	2 154	318	30	348	2 502
1985	1 107	187	15	585	17	5	94	2 010	291	32	323	2 333
1984	877	162	14	576	17	5	90	1 741	195	31	226	1,967

TABLE 3
PERSONNEL WORKING IN HEALTH FACILITIES (ALL TYPES OF FACILITIES)
(Continued)

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	DE FENSE	GOB Y POL Y BIENES	IESS	MUNICI-PALITY	SOLCA	OTHERS	TOTAL	FOR-PROFIT	NON PROFIT	TOTAL	HEALTH SECTOR TOTAL
NURSES AIDES												
1993	5 101	554	118	2 193	53	98	1 615	9 732	1 529	226	1 755	11 487
1992	6 471	644	176	2 432	51	89	1 553	11 416	1 559	230	1 789	13 205
1991	6 373	692	134	2 303	63	64	1 631	11 260	1 486	215	1 701	12 961
1990	6 038	707	129	2 195	55	59	1 538	10 721	1 358	225	1 583	12 304
1989	6 116	687	118	2 172	56	71	1 557	10 777	1 276	218	1 494	12 271
1988	6 018	700	111	2 222	55	63	1 542	10 711	1 350	219	1 569	12 280
1987	5 908	719	117	2 044	56	29	1 683	10 556	1 296	230	1 526	12 082
1986	5 882	678	115	2 037	48	39	1 673	10 472	1 206	166	1 372	11 844
1985	5 667	639	123	1 964	44	54	1 664	10 155	1 092	179	1 271	11 426
1984	5 660	595	126	1 868	43	52	1 608	9 952	1 121	154	1 275	11 227
TOTAL PERSONNEL												
1993	20 757	2 361	841	10 363	377	606	4 424	39 729	8 624	1 182	9 806	49 535
1992	25 240	2 840	1 196	11 194	445	512	4 360	45 787	8 479	1 233	9 712	55 499
1991	24 418	2 881	896	10 494	421	393	4 308	43 811	8 327	1 119	9 446	53 257
1990	22 887	2 790	710	10 026	353	347	4 105	41 218	5 872	1 136	7 008	48 226
1989	22 226	2 631	624	9 890	332	327	4 206	40 236	6 598	1 030	7 628	47 864
1988	21 476	2 829	664	9 528	310	308	4 017	39 132	7 401	1 076	8 477	47 609
1987	20 321	2 775	592	8 801	295	175	4 111	37 070	6 563	1 008	7 571	44 641
1986	19 429	2 714	610	8 597	246	237	3 933	35 766	6 568	836	7 404	43 170
1985	19 206	2 563	550	8 448	212	283	3 968	35 230	5 641	772	6 413	41 643
1984	18,561	2,559	540	8,203	200	270	3,884	34,217	5,206	712	5,918	40,135

(INEC CUADRO 7 VARIOUS YEARS)

TABLE 4
PERSONNEL WORKING IN HEALTH FACILITIES (ALL TYPES OF FACILITIES)

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	DE-FENSE	GOB Y POL Y BIENES	IESS	MUNICI-PALITY	SOLCA	OTHERS	TOTAL	FOR-PROFIT	NON-PROFIT	TOTAL	HEALTH SECTOR TOTAL
PHYSICIANS												
1993	29%	4%	3%	23%	1%	1%	4%	64%	33%	3%	36%	100%
1992	33%	4%	3%	24%	1%	1%	3%	69%	28%	3%	31%	100%
1991	33%	5%	2%	21%	1%	1%	4%	67%	30%	3%	33%	100%
1990	40%	6%	2%	27%	1%	1%	5%	80%	16%	3%	20%	100%
1989	35%	5%	2%	25%	1%	1%	4%	73%	24%	3%	27%	100%
1988	31%	5%	2%	24%	1%	1%	4%	68%	29%	3%	32%	100%
1987	33%	6%	2%	24%	1%	0%	4%	70%	27%	3%	30%	100%
1986	33%	5%	2%	23%	0%	1%	4%	68%	29%	2%	32%	100%
1985	35%	6%	2%	23%	0%	1%	6%	73%	24%	3%	27%	100%
1984	35%	6%	2%	23%	0%	1%	7%	74%	23%	2%	26%	100%
NURSES												
1993	44%	5%	1%	27%	1%	2%	6%	86%	13%	1%	14%	100%
1992	52%	5%	2%	22%	1%	0%	4%	87%	12%	1%	13%	100%
1991	54%	5%	2%	21%	1%	0%	4%	87%	13%	1%	13%	100%
1990	53%	6%	1%	22%	1%	0%	4%	87%	12%	1%	13%	100%
1989	53%	6%	1%	21%	1%	0%	4%	86%	13%	1%	14%	100%
1988	51%	7%	1%	22%	1%	0%	4%	85%	14%	1%	15%	100%
1987	49%	7%	1%	24%	1%	0%	4%	86%	13%	1%	14%	100%
1986	49%	7%	1%	24%	1%	0%	4%	86%	13%	1%	14%	100%
1985	47%	8%	1%	25%	1%	0%	4%	86%	12%	1%	14%	100%
1984	45%	8%	1%	29%	1%	0%	5%	89%	10%	2%	11%	100%

TABLE 4
PERSONNEL WORKING IN HEALTH FACILITIES (ALL TYPES OF FACILITIES)
(Continued)

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	DE FENSE	GOB Y POL Y BIENES	IESS	MUNICI-PALITY	SOLCA	OTHERS	TOTAL	FOR-PROFIT	NON-PROFIT	TOTAL	HEALTH SECTOR TOTAL
NURSES AIDES												
1993	44%	5%	1%	19%	0%	1%	14%	85%	13%	2%	15%	100%
1992	49%	5%	1%	18%	0%	1%	12%	86%	12%	2%	14%	100%
1991	49%	5%	1%	18%	0%	0%	13%	87%	11%	2%	13%	100%
1990	49%	6%	1%	18%	0%	0%	13%	87%	11%	2%	13%	100%
1989	50%	6%	1%	18%	0%	1%	13%	88%	10%	2%	12%	100%
1988	49%	6%	1%	18%	0%	1%	13%	87%	11%	2%	13%	100%
1987	49%	6%	1%	17%	0%	0%	14%	87%	11%	2%	13%	100%
1986	50%	6%	1%	17%	0%	0%	14%	88%	10%	1%	12%	100%
1985	50%	6%	1%	17%	0%	0%	15%	89%	10%	2%	11%	100%
1984	50%	5%	1%	17%	0%	0%	14%	89%	10%	1%	11%	100%
TOTAL PERSONNEL												
1993	42%	5%	2%	21%	1%	1%	9%	80%	17%	2%	20%	100%
1992	45%	5%	2%	20%	1%	1%	8%	83%	15%	2%	17%	100%
1991	46%	5%	2%	20%	1%	1%	8%	82%	16%	2%	18%	100%
1990	47%	6%	1%	21%	1%	1%	9%	85%	12%	2%	15%	100%
1989	46%	5%	1%	21%	1%	1%	9%	84%	14%	2%	16%	100%
1988	45%	6%	1%	20%	1%	1%	8%	82%	16%	2%	18%	100%
1987	46%	6%	1%	20%	1%	0%	9%	83%	15%	2%	17%	100%
1986	45%	6%	1%	20%	1%	1%	9%	83%	15%	2%	17%	100%
1985	46%	6%	1%	20%	1%	1%	10%	85%	14%	2%	15%	100%
1984	46%	6%	1%	20%	0%	1%	10%	85%	13%	2%	15%	100%

(INEC CUADRO 7 VARIOUS YEARS)

TABLE 5
THE EVOLUTION OF STAFFING PATTERNS IN THE HEALTH SECTOR OF ECUADOR

PERSONNEL TYPE/ YEAR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR
PHYSICIANS			
1993	19 62%	44 42%	24 53%
1992	22 36%	40 48%	25 95%
1991	20 59%	41 03%	24 64%
1990	19 81%	19 51%	19 75%
1989	19 19%	28 35%	21 00%
1988	18 36%	34 91%	21 64%
1987	17 51%	30 02%	19 99%
1986	16 95%	31 62%	19 85%
1985	17 28%	25 97%	19 00%
1984	16 31%	23 09%	17 65%
NURSES			
1993	8 01%	5 22%	7 46%
1992	9 22%	5 62%	8 51%
1991	8 51%	5 33%	7 88%
1990	7 72%	4 87%	7 16%
1989	6 98%	4 50%	6 49%
1988	6 46%	4 53%	6 08%
1987	6 00%	3 96%	5 59%
1986	5 42%	3 55%	5 05%
1985	5 06%	3 29%	4 71%
1984	4 38%	2 30%	3 97%

PERSONNEL TYPE/ YEAR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR
AUXILIARIES			
1993	24 50%	17 90%	23 19%
1992	28 73%	18 24%	26 66%
1991	28 34%	17 35%	26 17%
1990	26 99%	16 14%	24 84%
1989	27 13%	15 24%	24 77%
1988	26 96%	16 00%	24 79%
1987	26 57%	15 56%	24 39%
1986	26 36%	13 99%	23 91%
1985	25 56%	12 96%	23 07%
1984	25 05%	13 00%	22 66%
MDs NURSES AND AUXILIARIES AS PERCENT OF ALL PERSONNEL			
1993	52 12%	67 54%	55 18%
1992	60 32%	64 34%	61 11%
1991	57 45%	63 71%	58 69%
1990	54 52%	40 53%	51 75%
1989	53 29%	48 08%	52 26%
1988	51 79%	55 44%	52 51%
1987	50 08%	49 54%	49 97%
1986	48 73%	49 16%	48 82%
1985	47 90%	42 23%	46 78%
1984	45 74%	38 39%	44 28%

TABLE 6
PHYSICIAN FTEs BY PLACE OF EMPLOYMENT

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	DE FENSE	MIN GOBIER NO Y POLICIA Y BIENESTAR	IESS	MUNICI- PALITY	SOLCA	OTHERS	TOTAL	NON- PROFIT	FOR- PROFIT	TOTAL	HEALTH SECTOR TOTAL
1993	2987 4	364 4	113 4	1857 7	71 2	83 0	454 0	5931 3	196 7	1632 8	1829 5	7760 8
1992	3551 0	489 1	173 4	2248 0	72 1	66 8	379 8	6980 1	190 1	1470 6	1660 7	8640 7
1991	3362 4	477 5	127 0	1845 8	72 2	61 2	399 4	6345 5	177 8	1393 6	1571 5	7916 9
1990	3244 4	486 0	105 6	1972 4	61 6	48 7	395 3	6313 9	209 5	1321 5	1531 0	7844 9
1989	3089 9	407 5	116 4	1835 6	43 7	58 8	374 0	5926 0	196 8	1458 5	1655 2	7581 2
1988	2849 9	453 7	113 1	1831 0	49 7	60 1	372 0	5729 5	184 1	1650 3	1834 5	7564 0
1987	2751 7	461 0	100 8	1682 3	44 3	34 6	377 1	5451 8	172 9	1518 4	1691 3	7143 1
1986	2780 6	430 4	87 9	1401 3	36 3	38 6	349 6	5124 7	146 9	1481 5	1628 4	6753 2
1993	38 5%	4 7%	1 5%	23 9%	0 9%	1 1%	5 9%	76 4%	2 5%	21 0%	23 6%	100 0%
1992	41 1%	5 7%	2 0%	26 0%	0 8%	0 8%	4 4%	80 8%	2 2%	17 0%	19 2%	100 0%
1991	42 5%	6 0%	1 6%	23 3%	0 9%	0 8%	5 0%	80 2%	2 2%	17 6%	19 8%	100 0%
1990	41 4%	6 2%	1 3%	25 1%	0 8%	0 6%	5 0%	80 5%	2 7%	16 8%	19 5%	100 0%
1989	40 8%	5 4%	1 5%	24 2%	0 6%	0 8%	4 9%	78 2%	2 6%	19 2%	21 8%	100 0%
1988	37 7%	6 0%	1 5%	24 2%	0 7%	0 8%	4 9%	75 7%	2 4%	21 8%	24 3%	100 0%
1987	38 5%	6 5%	1 4%	23 6%	0 6%	0 5%	5 3%	76 3%	2 4%	21 3%	23 7%	100 0%
1986	41 2%	6 4%	1 3%	20 8%	0 5%	0 6%	5 2%	75 9%	2 2%	21 9%	24 1%	100 0%

TABLE 7
ESTIMATING THE SERVICE PROVISION CAPACITY OF THE HEALTH SECTOR

Assuming the capacity of a full-time physician is 5760 consultations per year
(5760 = 48 weeks/year * 40 hours/week * 4 consultations/hour * 75 percent of time in service delivery)

THOUSANDS OF CONSULTATIONS PER YEAR

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	DEFENSE	MIN GOB y POLICIA y BIENESTAR	IESS	MUNICI PALITIES	SOLCA	OTHERS	TOTAL	NON-PROFIT	FOR PROFIT	TOTAL	HEALTH SECTOR TOTAL
1993	17 208	2 099	653	10 700	410	478	2 615	34 164	1 133	9 405	10 538	44 702
1992	20 454	2 817	999	12 948	415	385	2 188	40 205	1 095	8 470	9 565	49 771
1991	19 367	2 751	732	10 632	416	352	2 301	36 550	1 024	8 027	9 052	45 602
1990	18 688	2 800	608	11 361	355	280	2 277	36 368	1 207	7 612	8 819	45 187
1989	17 798	2 347	671	10 573	252	338	2 154	34 134	1 133	8 401	9 534	43 668
1988	16 415	2 613	652	10 546	286	346	2 143	33 002	1 061	9 506	10 567	43 568
1987	15 850	2 655	581	9 690	255	199	2 172	31 402	996	8 746	9 742	41 144
1986	16 016	2 479	507	8 072	209	222	2 014	29 519	846	8 534	9 380	38 898

TABLE 8

A ANNUAL NUMBER OF PHYSICIAN-PROVIDED CONSULTATIONS PER INSTITUTION

(In Thousands)

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	MIN GOB y POLICIA y DEFENS	BIENESTAR	IESS	MUNICI-PALITIES	SOLCA	OTHERS	TOTAL	NON-PROFIT	FOR-PROFIT	TOTA	HEALTH SECTOR TOTAL
1993	5154 81	437 36	277 22	NA	127 3	146 7	874 38	9 327	896 89	206 97	1 104	10 431
1992	5864 68	466 63	304 318	NA	151 364	125 49	923 335	10 145	865 41	283 25	1 149	11 294
1991	4585 98	539 2	223 515	NA	123 385	93 431	1153 04	9 028	813 26	276 94	1090	10 118

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B PHYSICIAN SERVICE PROVISION CAPACITY UTILIZATION

(Table 8A as a Percent of Table 7)

	PUBLIC SECTOR								PRIVATE SECTOR			
YEAR	MOH	MIN GOB y POLICIA y DEFENS	BIENESTAR	IESS	MUNICI-PALITIES	SOLCA	OTHERS	TOTAL	NON-PROFIT	FOR-PROFIT	TOTA	HEALTH SECTOR TOTAL
1993	30%	21%	42%	NA	31%	31%	33%	27%	79%	2%	10%	23%
1992	29%	17%	30%	NA	36%	33%	42%	25%	79%	3%	12%	23%
1991	24%	20%	31%	NA	30%	27%	50%	25%	79%	3%	12%	22%

TABLE 9
NUMBER OF OUTPATIENT HEALTH FACILITIES

	PUBLIC SECTOR								PRIVATE SECTOR			
GEOGRAPHIC DOMAIN	MOH	DE-FENSE	GOBIERNO Y POLICIA	IESS	MUNICI PALITIES	SOLCA	OTHERS	TOTAL	FOR PROFIT	NON PROFIT	TOTAL	HEALTH SECTOR TOTAL
1993												
PICHINCHA	184	15	47	262	5	0	3	516	0	20	20	536
GUAYAS	173	9	24	129	3	0	6	344	0	42	42	386
REPUBLIC	1523	65	166	1027	12	2	25	2820	1	132	133	2953
REST OF REP	1166	41	95	636	4	2	16	1960	1	70	71	2031
1992												
PICHINCHA	181	15	32	265	5	0	4	502	1	18	19	521
GUAYAS	200	10	24	127	3	0	7	371	0	39	39	410
REPUBLIC	1556	67	104	991	12	2	27	2759	1	128	129	2888
REST OF REP	1175	42	48	599	4	2	16	1886	0	71	71	1957
1991												
PICHINCHA	151	14	30	261	5	0	4	465	0	21	21	486
GUAYAS	115	11	24	126	5	0	5	286	0	35	35	321
REPUBLIC	1393	70	92	977	15	2	26	2575	0	120	120	2695
REST OF REP	1127	45	38	590	5	2	17	1824	0	64	64	1888
1990												
PICHINCHA	142	16	32	255	5	0	3	453	0	20	20	473
GUAYAS	114	11	24	114	5	0	6	274	0	3	38	312
REPUBLIC	1260	71	93	894	15	3	28	2364	0	124	124	2488
REST OF REP	1004	44	37	525	5	3	19	1637	0	101	66	1703
1989												
PICHINCHA	133	15	28	259	6	0	4	445	0	20	20	465
GUAYAS	112	11	26	118	5	0	6	278	0	37	37	315
REPUBLIC	1207	68	91	911	16	3	37	2333	0	124	124	2457
REST OF REP	962	42	37	534	5	3	27	1610	0	67	67	1677

TABLE 9
NUMBER OF OUTPATIENT HEALTH FACILITIES
(Continued)

GEOGRAPHIC DOMAIN	PUBLIC SECTOR								PRIVATE SECTOR			HEALTH SECTOR TOTAL
	MOH	DE FENSE	GOBIERNO Y POLICIA	IESS	MUNICI PALITIES	SOLCA	OTHERS	TOTAL	FOR PROFIT	NON PROFIT	TOTAL	
1988												
PICHINCHA	119	17	30	254	6	0	2	428	0	20	20	448
GUAYAS	110	11	27	110	5	0	6	269	0	30	30	299
REPUBLIC	1163	72	94	856	16	3	30	2234	0	115	115	2349
REST OF REP	934	44	37	492	5	3	22	1537	0	65	65	1602
1987												
PICHINCHA	117	19	33	238	6	0	4	417	0	20	20	437
GUAYAS	109	14	28	102	6	0	6	265	0	31	31	296
REPUBLIC	1144	79	100	794	18	3	27	2165	0	103	103	2268
REST OF REP	918	46	39	454	6	3	17	1483	0	52	52	1535
1986												
PICHINCHA	118	17	33	234	5	0	3	410	0	16	16	426
GUAYAS	113	14	27	95	6	0	6	261	0	32	32	293
REPUBLIC	1140	75	102	743	18	3	25	2106	0	92	92	2198
REST OF REP	909	44	42	414	7	3	16	1435	0	44	44	1479
1985												
PICHINCHA	114	19	34	214	5	0	4	390	0	16	16	406
GUAYAS	101	14	26	85	6	0	6	238	0	33	33	271
REPUBLIC	1115	77	100	667	17	3	22	2001	0	90	90	2091
REST OF REP	900	44	40	368	6	3	12	1373	0	41	41	1414
1984												
PICHINCHA	112	18	35	208	5	0	3	381	0	17	17	398
GUAYAS	82	14	26	76	5	0	6	209	0	32	32	241
REPUBLIC	1071	71	99	596	16	2	22	1877	0	87	87	1964
REST OF REP	877	39	38	312	6	2	13	1287	0	38	38	1325

(INEC CUADRO 4)

TABLE 10
COMPOSITION AND GEOGRAPHIC DISTRIBUTION OF INPATIENT HEALTH FACILITIES IN ECUADOR 1984-1993

	ABSOLUTE NUMBERS			PERCENTAGE COMPOSITION OF GEOGRAPHIC MARKETS			PERCENTAGE DISTRIBUTION OF SUBSECTORS FACILITIES		
GEO GRAPHIC DOMAIN	PUBLIC SECTOR	PRI VATE SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR
1993									
PICHINCHA	22	64	86	26%	74%	100%	13%	25%	20%
GUAYAS	38	69	107	36%	64%	100%	22%	27%	25%
REPUBLIC	175	258	433	40%	60%	100%	100%	100%	100%
REST OF REP	115	125	240	48%	52%	100%	66%	48%	55%
1992									
PICHINCHA	22	61	83	27%	73%	100%	13%	24%	20%
GUAYAS	38	69	107	36%	64%	100%	22%	27%	25%
REPUBLIC	172	252	424	41%	59%	100%	100%	100%	100%
REST OF REP	112	122	234	48%	52%	100%	65%	48%	55%
1991									
PICHINCHA	22	58	80	28%	72%	100%	13%	24%	19%
GUAYAS	38	66	104	37%	63%	100%	22%	27%	25%
REPUBLIC	173	244	417	41%	59%	100%	100%	100%	100%
REST OF REP	113	120	233	48%	52%	100%	65%	49%	56%
1990									
PICHINCHA	22	52	74	30%	70%	100%	13%	22%	18%
GUAYAS	37	66	103	36%	64%	100%	22%	28%	25%
REPUBLIC	169	235	404	42%	58%	100%	100%	100%	100%
REST OF REP	110	117	227	48%	52%	100%	65%	50%	56%
1989									
PICHINCHA	21	48	69	30%	70%	100%	13%	21%	17%
GUAYAS	36	65	101	36%	64%	100%	21%	28%	25%
REPUBLIC	168	233	401	42%	58%	100%	100%	100%	100%
REST OF REP	111	120	231	48%	52%	100%	66%	52%	58%

TABLE 10

COMPOSITION & GEOGRAPHIC DISTRIBUTION OF INPATIENT HEALTH FACILITIES,1984-1993

(Continued)

	ABSOLUTE NUMBERS			PERCENTAGE COMPOSITION OF GEOGRAPHIC MARKETS			PERCENTAGE DISTRIBUTION OF SUBSECTORS FACILITIES		
GEO GRAPHIC DOMAIN	PUBLIC SECTOR	PRIVAT SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEAI TH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR
1988									
PICHINCHA	21	44	65	32%	68%	100%	13%	19%	16%
GUAYAS	35	64	99	35%	65%		21%	28%	25%
REPUBLIC	168	226	394	43%	57%	100%	100%	100%	100%
REST OF RE	112	118	230	49%	51%	100%	67%	52%	58%
1987									
PICHINCHA	21	39	60	35%	65%	100%	13%	18%	16%
GUAYAS	34	62	96	35%	65%	100%	20%	29%	25%
REPUBLIC	167	212	379	44%	56%	100%	100%	100%	100%
REST OF RE	112	111	223	50%	50%	100%	67%	52%	59%
1986									
PICHINCHA	21	42	63	33%	67%	100%	13%	20%	17%
GUAYAS	34	63	97	35%	65%	100%	21%	31%	26%
REPUBLIC	164	205	369	44%	56%	100%	100%	100%	100%
REST OF RE	109	100	209	52%	48%	100%	66%	49%	57%
1985									
PICHINCHA	21	39	60	35%	65%	100%	13%	22%	18%
GUAYAS	34	62	96	35%	65%	100%	21%	35%	28%
REPUBLIC	163	178	341	48%	52%	100%	100%	100%	100%
REST OF RE	108	77	185	58%	42%	100%	66%	43%	54%
1984									
PICHINCHA	21	35	56	38%	63%	100%	13%	20%	17%
GUAYAS	34	62	96	35%	65%	100%	21%	35%	28%
REPUBLIC	162	176	338	48%	52%	100%	100%	100%	100%
REST OF RE	107	79	186	58%	42%	100%	66%	45%	55%

(INEC CUADRO 3)

TABLE 11
NUMBER OF INPATIENT HEALTH FACILITIES

GEOGRAPHIC DOMAIN	PUBLIC SECTOR								PRIVATE SECTOR			HEALTH SECTOR TOTAL
	MOH	DE-FENSE	GOBIERNO Y POLICIA	IESS	MUNICI PALITIES	SOLCA	OTHERS	TOTAL	FOR PROFIT	NON PROFIT	TOTAL	
1993												
PICHINCHA	16	1	1	1	2	1	0	22	63	1	64	86
GUAYAS	20	5	3	4	0	1	5	38	67	2	69	107
REPUBLIC	122	17	4	17	2	3	10	175	247	11	258	433
REST OF REP	86	11	0	12	0	1	5	115	117	8	125	240
1992												
PICHINCHA	16	1	1	1	2	1	0	22	60	1	61	83
GUAYAS	20	5	3	4	0	1	5	38	67	2	69	107
REPUBLIC	121	15	4	17	2	3	10	172	242	10	252	424
REST OF REP	85	9	0	12	0	1	5	112	115	7	122	234
1991												
PICHINCHA	16	1	1	1	2	1	0	22	58	0	58	80
GUAYAS	20	5	3	4	0	1	5	38	63	3	66	104
REPUBLIC	121	15	4	17	2	3	11	173	235	9	244	417
REST OF REP	85	9	0	12	0	1	6	113	114	6	120	233
1990												
PICHINCHA	16	1	1	1	2	1	0	22	52	0	52	74
GUAYAS	20	4	3	4	0	1	5	37	63	3	66	103
REPUBLIC	120	14	4	17	2	2	10	169	226	9	235	404
REST OF REP	84	9	0	12	0	0	5	110	111	6	117	227
1989												
PICHINCHA	16	1	1	1	1	1	0	21	48	0	48	69
GUAYAS	20	4	2	4	0	1	5	36	62	3	65	101
REPUBLIC	120	14	3	17	1	2	11	168	224	9	233	401
REST OF REP	84	9	0	12	0	0	6	111	114	6	120	231

TABLE 11
NUMBER OF INPATIENT HEALTH FACILITIES
(Continued)

GEOGRAPHIC DOMAIN	PUBLIC SECTOR								PRIVATE SECTOR			
	MOH	DE FENSE	GOBIERNO Y POLICIA	IESS	MUNICI PALITIES	SOLCA	OTHERS	TOTAL	FOR PROFIT	NON PROFIT	TOTAL	HEALTH SECTOR TOTAL
1988												
PICHINCHA	16	1	1	1	0	1	0	21	44	0	44	65
GUAYAS	20	4	1	4	0	1	5	35	61	3	64	99
REPUBLIC	121	14	2	17	1	2	11	168	219	7	226	394
REST OF REP	85	9	0	12	1	0	6	112	114	4	118	230
1987												
PICHINCHA	16	1	1	1	1	1	0	21	39	0	39	60
GUAYAS	19	4	1	4	0	1	5	34	59	3	62	96
REPUBLIC	120	14	2	17	1	2	11	167	205	7	212	379
REST OF REP	85	9	0	12	0	0	6	112	107	4	111	223
1986												
PICHINCHA	16	1	1	1	1	1	0	21	42	0	42	63
GUAYAS	19	4	1	4	0	1	5	34	60	3	63	97
REPUBLIC	118	13	2	17	1	2	11	164	198	7	205	369
REST OF REP	83	8	0	12	0	0	6	109	96	4	100	209
1985												
PICHINCHA	16	1	1	1	1	1	0	21	39	0	39	60
GUAYAS	19	4	1	4	0	1	5	34	59	3	62	96
REPUBLIC	123	13	2	17	1	2	5	163	171	7	178	341
REST OF REP	88	8	0	12	0	0	0	108	73	4	77	185
1984												
PICHINCHA	16	1	1	1	1	1	0	21	35	0	35	56
GUAYAS	19	4	1	4	0	1	5	34	59	3	62	96
REPUBLIC	123	13	2	16	1	2	5	162	169	7	176	338
REST OF REP	88	8	0	11	0	0	0	107	75	4	79	186

(INEC CUADRO 3)

TABLE 12
COMPOSITION AND GEOGRAPHIC DISTRIBUTION OF OUTPATIENT HEALTH FACILITIES IN ECUADOR, 1984-1993

	ABSOLUTE NUMBERS			PERCENTAGE COMPOSITION OF GEOGRAPHIC MARKETS			PERCENTAGE DISTRIBUTION OF SUBSECTORS FACILITIES		
GEOGRAPHIC DOMAIN	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR
1993									
PICHINCHA	516	20	536	96%	4%	100%	18%	15%	18%
GUAYAS	344	42	386	89%	11%	100%	12%	32%	13%
REPUBLIC	2820	133	2953	95%	5%	100%	100%	100%	100%
REST OF REP	1960	71	2031	97%	3%	100%	70%	53%	69%
1992									
PICHINCHA	502	19	521	96%	4%	100%	18%	15%	18%
GUAYAS	371	39	410	90%	10%	100%	13%	30%	14%
REPUBLIC	2759	129	2888	96%	4%	100%	100%	100%	100%
REST OF REP	1886	71	1957	96%	4%	100%	68%	55%	68%
1991									
PICHINCHA	465	21	486	96%	4%	100%	18%	17%	18%
GUAYAS	286	35	321	89%	11%	100%	11%	29%	12%
REPUBLIC	2575	120	2695	96%	4%	100%	100%	100%	100%
REST OF REP	1824	64	1888	97%	3%	100%	71%	53%	70%
1990									
PICHINCHA	453	20	473	96%	4%	100%	19%	16%	19%
GUAYAS	274	38	312	88%	12%	100%	12%	31%	13%
REPUBLIC	2364	124	2488	95%	5%	100%	100%	100%	100%
REST OF REP	1637	66	1703	96%	4%	100%	69%	53%	68%
1989									
PICHINCHA	445	20	465	96%	4%	100%	19%	16%	19%
GUAYAS	278	37	315	88%	12%	100%	12%	30%	13%
REPUBLIC	2333	124	2457	95%	5%	100%	100%	100%	100%
REST OF REP	1610	67	1677	96%	4%	100%	69%	54%	68%

TABLE 12
COMPOSITION AND GEOGRAPHIC DISTRIBUTION OF OUTPATIENT HEALTH FACILITIES IN ECUADOR, 1984-1993

(Continued)

GEOGRAPHIC DOMAIN	ABSOLUTE NUMBERS			PERCENTAGE COMPOSITION OF GEOGRAPHIC MARKETS			PERCENTAGE DISTRIBUTION OF SUBSECTORS FACILITIES		
	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR	PUBLIC SECTOR	PRIVATE SECTOR	TOTAL HEALTH SECTOR
1988									
PICHINCHA	428	20	448	96%	4%	100%	19%	17%	19%
GUAYAS	269	30	299	90%	10%	100%	12%	26%	13%
REPUBLIC	2234	115	2349	95%	5%	100%	100%	100%	100%
REST OF REP	1537	65	1602	96%	4%	100%	69%	57%	68%
1987									
PICHINCHA	417	20	437	95%	5%	100%	19%	19%	19%
GUAYAS	265	31	296	90%	10%	100%	12%	30%	13%
REPUBLIC	2165	103	2268	95%	5%	100%	100%	100%	100%
REST OF REP	1483	52	1535	97%	3%	100%	68%	50%	68%
1986									
PICHINCHA	410	16	426	96%	4%	100%	19%	17%	19%
GUAYAS	261	32	293	89%	11%	100%	12%	35%	13%
REPUBLIC	2106	92	2198	96%		100%	100%	100%	100%
REST OF REP	1435	44	1479	97%	3%	100%	68%	48%	67%
1985									
PICHINCHA	390	16	406	96%	4%	100%	19%	18%	19%
GUAYAS	238	33	271	88%	12%	100%	12%	37%	13%
REPUBLIC	2001	90	2091	96%	4%	100%	100%	100%	100%
REST OF REP	1373	41	1414	97%	3%	100%	69%	46%	68%
1984									
PICHINCHA	381	17	398	96%	4%	100%	20%	20%	20%
GUAYAS	209	32	241	87%	13%	100%	11%	37%	12%
REPUBLIC	1877	87	1964	96%	4%	100%	100%	100%	100%
REST OF REP	1287	38	1325	97%	3%	100%	69%	44%	67%

(INEC CUADRO 3)

TABLE 13
NEW PHYSICIAN GRADUATES AND NEWLY CREATED INSTITUTIONAL POSITIONS ECUADOR, 1982-1990

YEAR	NUMBER OF POSITIONS CREATED	NUMBER OF PHYSICIANS GRADUATED	EXCESS NO OF PHYSICIANS
1982	683	1170	487
1983	522	1081	559
1984	992	921	-71
1985	672	1137	465
1986	421	1066	645
1987	66	1014	948
1988	818	1007	189
1989	-316	1002	1318
1990	-618	633	1251
TOTAL	3240	9031	5791

SOURCE ADAPTED FROM OPS 1993 P 45

TABLE 14
NEW NURSE GRADUATES AND NEWLY CREATED INSTITUTIONAL POSITIONS ECUADOR, 1982-1990

YEAR	NUMBER OF POSITIONS CREATED	NUMBER OF NURSES GRADUATED	EXCESS NO OF NURSES
1982	97	135	38
1983	116	207	91
1984	222	225	3
1985	366	273	-93
1986	169	328	159
1987	269	331	62
1988	241	330	89
1989	201	273	72
1990	333	197	-136
TOTAL	2014	2299	285

SOURCE ADAPTED FROM OPS 1993 P 49

TABLE 15
PHYSICIAN POSITIONS IN ECUADOR, 1990

TYPE OF ARRANGEMENT	NUMBER	PERCENT
WORKS FOR A COMPANY OR BUSINESS WHICH HE/SHE MAY OWN AND WHICH AND HAS ONE OR MORE EMPLOYEES	4 545	30 7%
SELF-EMPLOYED WITH NO EMPLOYEES	1 229	8 3%
EMPLOYEE OR SALARIED		
1 MUNICIPALITY	286	1 9%
2 CENTRAL GOV T DEPENDENCIES	5 749	38 8%
3 PRIVATE COMPANIES	3,010	20 3%
TOTAL (including only those providing information on type or arrangement)	14 819	100 0%
OVERALL TOTAL	15,540	

SOURCE ADAPTED FROM OPS 1993 P 66

TABLE 16
INSURANCE COMPANIES AUTHORIZED TO SELL HEALTH INSURANCE IN ECUADOR

COMPANY	1986	1987	1988	1989	1990	1991	1992	1993
NATIONAL COMPANIES								
AMAZONAS CIA	X	X	X	X	X	X	X	X
ATLAS CIA	X	X	X	X	X	X	X	X
CIA ECUATORIANA DE SEGUROS	X	X	X	X	X	X	X	X
CIA NACIONAL DE SEGUROS HUANCAVILCA	X	X	X	X	X	X	X	X
CIA DE SEGUROS LOS ANDES								
MEMORIAS SERVICIOS DEL ECUADOR	X	X	X	X	X	X	X	X
SEGUROS ROCAFUERTE	X	X	X	X	X	X	X	X
TOTAL NO OPERATING IN ECUADOR					21	20	20	20
FOREIGN COMPANIES								
AMERICAN HOME ASSURANCE	X	X	X	X	X	X	X	X
HARTFORD	X	X						
CIGNA WORLDWIDE INSURANCE			X	X	X	X	X	X
PAN AMERICAN LIFE CO	X	X	X	X	X	X	X	X
TOTAL NO OPERATING IN ECUADOR					7	6	5	5
NO OF MIXED COMPANIES (I E NATIONAL AND FOREIGN) OPERATING IN ECUADOR					4	4	4	4

TABLE 17

EVOLUTION OF NET INSURANCE PREMIUMS IN ECUADOR

(Thousands of Sucres)

YEAR	HEALTH	ALL GENERAL INSURANCE	HEALTH AS A % OF ALL INS
1978	307	1 466 258	0 02%
1979	142	1 976 265	0 01%
1980	145	2 211 031	0 01%
1981	302	2 644 528	0 01%
1982	330	3 045 267	0 01%
1983	3 567	3 857 398	0 09%
1984	3 677	5 141 477	0 07%
1985	(567)	7 445 345	-0 01%
1986	4 847	12 388 021	0 04%
1988	16 562	27 980 010	0 06%
1989	28 825	46 780 490	0 06%
1990	88 006	69 794 839	0 13%
1991	268 233	107 032 283	0 25%
1992	257 588	176 497 428	0 15%
1993	378,366	289,439,790	0 13%

TABLE 18
THE EVOLUTION OF THE THIRD PARTY, INDEMNITY HEALTH INSURANCE INDUSTRY OF ECUADOR

YEAR	VALUE OF HEALTH INSURANCE CLAIMS PAID (IN 000 SUCRES)	TWO YEAR MOVING AVERAGE (MA)	ANNUAL GROWTH RATE (AGR)	AGR OF TWO YEAR MA	VALUE OF ALL INSURANCE CLAIMS PAID (000 SUCRES)	HEALTH AS A % OF THE VALUE OF ALL CLAIMS PAID
1978	45	-----	-----	-----		
1979	38	42	-15 1%	-----		
1980	60	49	56 4%	17 7%		
1981	15	38	-74 5%	-23 5%	1 469 623	0 001%
1982	162	89	962 4%	135 9%	2 134 925	0 008%
1983	904	533	458 0%	501 4%	2 305 311	0 039%
1984	4 344	2 624	380 4%	392 2%	2 777 130	0 156%
1985	2 922	3 633	-32 7%	38 4%	3 529 356	0 083%
1986	5 244	4 083	79 5%	12 4%	4 662 874	0 112%
1987	6 440	5 842	22 8%	43 1%	8 013 867	0 080%
1988	13 310	9 875	106 7%	69 0%	13 551 432	0 098%
1989	31 455	22 382	136 3%	126 7%	23 675 937	0 133%
1990	55 689	43 572	77 0%	94 7%	40 889 634	0 014%
1991	415 511	235 600	646 1%	440 7%	62 081 954	0 669%
1992	473 258	444 385	13 9%	88 6%	124 552 174	0 380%
1993	298,986	386,122	-36 8%	-13 1%	144,047,060	0 208%

About *Initiatives*...

Private Initiatives for Primary Healthcare (Initiatives), is a demonstration project funded by USAID and managed by the JSI Research & Training Institute It was designed to test different models of sustainable private sector basic health service delivery systems, and to support local USAID missions' participation in health sector reform efforts Focusing on Ghana, Nigeria, Ecuador and Guatemala, *Initiatives* provides technical assistance to sup port the development of local initiative groups (LIGs), which represent different models of private sector healthcare Technical assistance is also provided to support the development of local management groups (LMGs), which could serve health care providers as a local source of technical assistance in the long term Documentation and analysis of the experi ence of these *Initiatives* supported organizations will yield insights into the prerequisites for financially sustainable private basic health services, and will contribute to our understand ing of the conditions necessary to establish, maintain, and expand the availability and accessibility of quality healthcare to low income urban populations

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For a copy of the full report of this survey or for more information about *Initiatives*, please contact

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