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**AN EVALUATION OF
THE MCH/FP PROJECT
IN SUR MEDIO, PERU**

**A Report Prepared By:
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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

In July 1979 the Government of Peru and USAID signed a three-year, \$1.8 million contract to develop maternal child health and population (MCH/POP) services in the Sur Medio Region. The basic objectives were to deliver the services through a network of 100 health posts and up to 2,000 promoters at the community level, and to develop components for logistics, information, and educational support. To date, after 20 months and \$500,000, the project has achieved the following results:

- Most MCH and family planning (FP) services are being offered through hospitals, and there has been a gradual shift toward peripheral services. This means that, to date, the project has had little impact on the delivery of peripheral services because hospital services already existed. However, services are being delivered from about 100 health posts, 45 of which are new.
- Family planning is enjoying increasing acceptance, although approximately 80 percent of acceptors have entered through a hospital. Recently, materials were distributed to health posts. A gradual expansion of the program into the more rural areas can be expected. In certain geographical areas, the advancement of services has been curtailed by considerable resistance from the Church.
- The supplementary feeding program functions satisfactorily in the urban and semi-urban areas, but it is primarily a short-range food subsidy program with no long-term benefits. It is possible and feasible to modify efforts to use rations to encourage broader development activities.
- Considerable training, principally for professional staff, has been conducted. Unfortunately, a large percentage of the staff who were trained were contracted and left the project after they were trained for higher salaries and job security.
- Equipment has been purchased and delivered to the 45 new health posts. With this equipment they will be able to provide basic MCH and family planning services.
- An overwhelming volume of norms for tasks and job descriptions has been developed, but the norms are impractical and must be simplified. An information system is evolving, but at this time it is of little use because the data are poor in quality and because compilation has been delayed.

- No logistics or supervisory system exists. The latter has been described in detail on paper and is being implemented.
- A series of manuals for training promoters has been produced and will be ready soon for printing. These materials are costly, but well prepared, and they may be useful as a national model. To date, there has been little effort to prepare materials for sanitarians and promoters at the community level, but the material in the manuals could be adapted for that purpose.
- Only 12 promoters have been trained; 9 are working as paid, full-time employees of cooperatives (this does not conform to the anticipated model). Although this is far below the target, in the absence of supporting subsystems, expansion should be delayed further.

In essence, all of the elements are present to put the entire system into operation. What is missing is the administrative structure and leadership to put all the pieces together in a balanced, coherent package. For example, in the absence of global project planning, considerable training was undertaken, but development of the logistics system was ignored.

Until recently, the project was supposedly managed at the area level by the area director, with technical support from a project coordinator. This arrangement was complicated by the existence of the Primary Care Project, which has a separate coordinator. Neither coordinator has any executive authority. The area directors, who perform the equivalent of three full-time jobs, have been unable to give sufficient attention to the projects. Consequently, pressure to effect necessary changes in peripheral services has been noticeably absent.

The project also has been hindered by its image as a purely family planning project, arousing suspicions and stimulating passive resistance on many sides.

To remedy these and other problems, efforts to integrate this project with the Primary Care Project are being redoubled, and the sub-director in Ica has been given responsibility for the overall development and management of the peripheral services. Now that the services have a director, they may, it is hoped, begin to function.

Area 3, in the sierra, has been cut off from the project since July 1980, when administrative responsibility for Area 3 passed from Sur Medio to the Ayacucho Health Region for political reasons. This was an administratively unsound decision, and efforts are underway to reinstate the area in Sur Medio.

In summary, it is necessary now to shift attention away from paper work and training and toward the development of the logistic systems and the implementation of the administrative hierarchy to enhance supervision. More emphasis should be given to the development of educational materials, particularly for community activities.

SUMMARY OF RECOMMENDATIONS

The recommendations contained in the body of the report have been summarized below to facilitate discussion. They are organized under the same headings (see Chapter II).

Pre-, Intra-, and Postnatal Services

At health centers and health posts, more emphasis should be placed on the identification of pregnant women who should be convinced of the importance of regular prenatal checkups. A tickler file (chronological) could be kept to remind the nurse or sanitarian to follow up gestating women who fail to keep their appointments.

Each woman should be seen at least once after she has given birth. Follow-up could be done in the hospital, or the woman could be referred to the health delivery point which, theoretically, was responsible for her entry into the system. If no such visit is recorded at the hospital, the hospital should inform the appropriate health delivery point that a follow-up visit should be made.

Family Planning Services

The sanitarians and promoters who are working in Area 2 but who were not trained by the project should be trained in population/family planning methods as soon as possible to facilitate the extension of this service component.

The regional educational team should develop strategies and materials for sanitarians and promoters, particularly in Area 1, so that they can attract acceptors to the family planning program. The objective should be to break down the resistance of specific groups, such as males, by dealing directly with identified concerns.

Child Care

More attention should be given to maternal health, using prenatal and postpartum visits, and the food program to identify problems that affect

children. Sanitarians should make a special effort to work with local school teachers, who could make referrals and suggest useful sites for home visits.

Supplementary Feeding Program

Recipients of food rations at a given distribution point should be organized into formal mothers' clubs. As a requirement for membership, the women must contribute a fixed sum each month to a common fund which could be used to finance community development activities, including supplementary feeding programs.

The clubs should be formed in areas where food is already being distributed. Recipients who are unwilling to contribute to the common fund should be dropped from the program and replaced by others equally in need but willing to participate fully. Communities that are unwilling to establish a club should be replaced.

The mothers' clubs should be a principal target group for health education efforts of all kinds.

Additional rations should not be provided, nor should additional distribution points be set up, until mothers' clubs have been established at existing distribution points.

In expanding the number of distribution points, the existing pattern of radiating from urban areas toward the periphery should not be followed. The project should move directly into rural areas where there is not only a demonstrated nutritional need, but also where access to foodstuffs is limited. Obviously, the logistics for such a distribution network must be designed. The distribution of foodstuffs might be coupled with the delivery of other supplies.

The mothers themselves should be responsible for packaging and distributing rations. This activity could be coordinated through the mothers' clubs, or the responsibility rotated, and supervised by clinic personnel.

Control of Intestinal Parasitism and Diarrheas

The manuals used to teach promoters how to control intestinal parasitism and diarrheas should be condensed, and the information should be summarized in flip charts or other expository materials for promoters and sanitarians. In this way, the project can more fully capitalize on the tremendous investment in the manuals.

Vaccinations

Experts from the Ministry of Health (MOH) or the Pan American Health Organization/World Health Organization (PAHO/WHO) should be asked to assist the region in redesigning the entire vaccination strategy.

Detection of Cervical and Breast Cancers

The director of Area 3 should determine why there is no program to detect cervical cancer in the area, and (s)he should try to establish mechanisms that would facilitate the introduction of such a program, at least in hospitals in Area 3.

Information and Education for Couples and the Community

Under the guidance of the regional director, health educators should develop strategies and set priorities for health education efforts in communities. Simultaneously, they should deemphasize the training of program staff.

The manuals for promoters should be completed and printed as soon as possible.

No program activity that is likely to require large investments of staff time and resources (e.g., preparing educational materials) should be undertaken until the costs and benefits of various alternatives have been analyzed thoroughly and a strategy has been selected to achieve maximum benefit from an investment within a given budgetary range.

Integration of Sub-Programs

Under the direction of the regional director, regional and area staff should design a plan of action to integrate fully the various programs. Specific subsystems of the program should be examined to determine and ensure compatibility of inputs and outputs from and for existing external projects. At the least, the subsystems for supplies, information, supervision, references, and training should be examined to ensure that an integrated system satisfactory to all is produced.

Despite the internal financial weakness of the government, USAID should continue to phase out the contracted personnel who were specified in the project agreement.

With a few minor exceptions, the salaries of staff for future projects should not be covered by project funds. The approach yields few long-term benefits and causes a number of short-term problems.

PROSMIP is a separate project and its budget should be reduced. The majority of the remaining funds should be reprogrammed and transferred to the Primary Care Project. To minimize administrative duplication, only salary payments should continue to be provided under the present project.

Implementation of Administrative Hierarchy

The hierarchical system (or supervisory system) should be meticulously examined to determine whether its geographical proximity, access to logistical support, and span of control are adequate.

The regional director should hold a series of meetings, first with the area directors and their assistants and then with staff at each level, to define and clarify administrative responsibilities at each level and within each subsystem (e.g., information, supplies, reference, etc.). The regional director should then issue a directive indicating that the agreed-upon actions are to be adhered to.

People with hierarchical relationships should meet periodically (at least once a month) to further clarify responsibilities and expectations and to exchange information. This procedure should continue indefinitely.

Administrative Structures for Regions and Areas

The assistant directors in each area should be delegated full responsibility for the development and management of health care delivery at health centers and health posts and in the communities. The assistant directors should be responsible for expediting the development and implementation of the various supporting subsystems that are needed to make the services function effectively.

The coordinators of the MCH/POP component should continue to be responsible for the quality of MCH/POP services, and they should work through the assistant director to effect any necessary changes.

The assistant PROSMIP coordinators should provide staff support to the assistant directors as they try to organize and manage the peripheral system.

The area director who has been proposed to direct the hospital should be rejected and an additional assistant director should be named and charged with running the base hospital in each area.

Global Planning

Regional and top-level area staff should examine the current program, and future short- and medium-term activities and responsibilities, to fill in gaps. Planning techniques, such as PERT and Gaant charts, should be used. Supervisory personnel should use the techniques to monitor and adjust progress.

Non-Technical Influences on Management and Development

The regional director should intervene when personalities clash and affect program implementation, and try to identify the causes of administrative and communication problems. Together, the various parties should try to resolve their problems.

Supervision

One person in each hospital should be responsible for supervising all activities at health centers and health posts that report directly to the respective hospital. Where there are few service delivery sites, this responsibility may be included as an incremental task in the workload of an existing staff member. Where a large number of service delivery points is involved, at least one full-time person should be held responsible for the administration of the centers and posts.

Supply System

The supply officers should draft a paper that describes how, in their opinion, the supply system might function most effectively. In a manual, they should describe in detail the flow of physical supplies, funds, and paperwork throughout the system and define the roles and responsibilities of each level and each person in the system. The possibility of using health centers and health posts as intermediate supply points should be explored also. To facilitate this task, the general guidelines developed at the national level should be used. Technical assistance should be requested if it is desired.

The draft should be reviewed by the directors and other staff and revised. The system should then be tested in one or more districts and modified before it is proposed for general adoption.

The storage areas of PROSMIP should be combined with the rest of the system, and responsibility for purchasing, dispatching, and control should be transferred to the overall system. The PROSMIP storekeeper should be integrated into the overall system.

The administration of the rotating drug fund should be reviewed and revised. The assistant PROSMIP coordinator for Area 2 should no longer be responsible for purchasing and transferring funds. This task should be integrated into the supply system.

The new system should include mechanisms for estimating the demand for all articles and for rationalizing acquisitions.

Transport and Maintenance

The distribution and use of each vehicle in the health region should be analyzed to ensure more optimal use of all vehicles and the provision of transport, at least part of the time, to health centers that must provide extensive supervision.

The requirements for transporting sanitarians who supervise promoters should be analyzed health post by health post. Where the terrain permits their use, bicycles should be purchased with project funds. Sanitarians should be enabled to use public transportation if vehicles cannot be purchased.

The regional director should try to estimate and procure an adequate budget for gasoline and per diem to facilitate an active and regular system of supervision.

The Ministry of Health should establish a spare-parts inventory for Land Rovers to facilitate repairs in all regions of the country.

Training

Training in the technical aspects of MCH/POP should be halted, but incremental training for sanitarians who did not enroll in the earlier MCH/POP course should continue. The latter should be arranged as quickly as possible, and priority should be given to persons who now handle or will distribute contraceptive materials.

Training for promoters should be postponed until other necessary program activities (prerequisites to the effective completion of community-level tasks) are completed.

Seminars on the implementation of subsystems for information and supplies should be designed and conducted before actual implementation. These seminars should follow the designs for the subsystems.

Quarterly or trimesterly seminars for various categories of project personnel should be scheduled to provide continuing education and to foster camaraderie among staff.

Future visits to observe activities should be made almost exclusively within the country, both to reduce the budget and to capitalize on similar experiences in each region.

Human Resources

Job descriptions for each level should be reexamined and modified to more adequately reflect the reality of the work environment. Priorities should be established, and guidelines for time spent on each activity should be prepared. Representatives of the respective categories of staff and their immediate supervisors should help revise their own job descriptions. Each member of the staff should receive a copy of his job description, which should be used as a norm for supervision.

The staffing requirements for each delivery point should be analyzed to determine the adequacy and use of existing staff. Adjustments should be made where underutilization is evident.

Where possible and feasible, specific responsibility for identified program components should be delegated to various members of the regional staff. These persons should try to concentrate their work in the assigned areas.

Information System

Further modification of the information format should be delayed until the system which will be imposed throughout Peru has been completed. Once that system is in place, staff should be trained to use it.

Those who are responsible for supervision should be required to submit each month summaries of the activities that are conducted at the levels under direct supervision. In other words, health centers should be responsible for collecting and compiling the necessary reports from the health posts under their jurisdiction, and so forth throughout the system. Simple formats for the summary must be developed to reduce this workload to a minimum.

Statistical auxiliaries should work full-time to compile data. Their services would be better used if they served more than one health center.

Indicators should include a breakdown, by levels; where this is neither practical nor feasible, hospital services should be separated from services at other levels.

A reporting format, including graphics, should be designed to facilitate the interpretation of data. This could be done nationally or locally.

After the new format has been introduced, the persons who designed it should hold a series of seminars for all supervisory personnel, including program directors, to show how the system is used and how data are interpreted.

Evaluation

The second household survey should be made at the end of the project to determine impact at that time.

Financial Management

Financial reports should be submitted promptly to USAID at the end of each quarter.

Because of questionable purchasing practices, the sum of S/3,581,920. should be disallowed from project expenditures. Included in this figure are 260 stainless steel pans and six gynecological tables diverted while en route to the project site.

ABBREVIATIONS

IUD	Intrauterine Device
MCH/FP	Maternal Child Health/Family Planning
MOH	Ministry of Health
ORDEICA	Peruvian Government Planning and Coordinating Agency
ORS	Oral Rehydration Salt
PAHO	Pan American Health Organization
PHC	Primary Health Care
POP	Population
USAID	United States Agency for International Development
WHO	World Health Organization
WFP	World Food Program

I. DESCRIPTION OF SUR MEDIO REGION

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The Sur Medio Region encompasses all of the Department of Ica, which is principally coastal desert punctuated by irrigated valleys, and portions of the sierra of the Departments of Ayacucho and Huancavelica. Administratively, the region is divided into three areas, centering on Chincha, Ica, and Lucanoas/Parininacochas, respectively. The total 1980 population was approximately 650,000, of which about 19.5 percent, or 126,750, are children under five; there are 125,000 women of childbearing age. About 46 percent of the population lives in the Ica-Nazca-Palpa Area (Area 2); another 38.5 percent live in Chincha (Area 1).

The physical infrastructure of the health system is constituted as follows:

	<u>Total</u>	<u>Area 1</u>	<u>Area 2</u>	<u>Area 3</u>
Base Hospitals	3	1	1	1
Other Hospitals	5	1	3	1
Health Centers	19	5	11	3
Health Posts (Total)	94	28	30	36
New	45	17	16	12
Existing	49	11	14	24

It should be noted that some health posts were designated recently as health centers; thus, the number of health posts has been reduced. In total, however, coverage to the peripheral areas has expanded 75 percent since the project was conceived and implemented.

No construction has been undertaken by the Sur Medio project; in fact, some health posts are operating out of private homes. The project has, however, helped to train the personnel who are working in the new posts. It also has provided much of the equipment for those posts.

The region has acquired other resources through other related projects. USAID, for example, also financed the Primary Care Project which, at least theoretically, completes the basic list of services offered in rural areas. The contraceptive materials and technical assistance used in the project come from other sources.

Coverage has been somewhat further extended by community-based health workers, including 36 promoters who were trained under the Primary Care Project, 33 midwives who were trained by regional staff in earlier efforts, and 12 promoters who were trained under this project. Numerous other promoters have been trained by staff who do fieldwork required for their own training programs. Lacking any concrete program or system within which to work, they are largely non-functional.

II. INTRODUCTION TO THE PROJECT

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The Project Agreement for the Sur Medio Health Region Project in Maternal Child Health and Population was signed by USAID and the Government of Peru on July 29, 1979. Its purpose was to promote the development of maternal child health and population services in the Sur Medio Region, principally in the rural areas. As originally conceived, it was to be a pilot project to develop a rural health infrastructure for the country. For this reason, the rather substantial sum of \$1.8 million dollars was allotted to provide equipment for the various newly established health delivery points, and support for training, logistics (gasoline and per diem), educational materials and equipment, and salaries for contracted staff.

Scope of Work

Approximately seven weeks were allotted under the contract for a comprehensive evaluation of the status of the project, which is approximately 20 months old and which has spent approximately \$500,000. The focus of the analysis is the managerial, as opposed to clinical, aspects. This evaluation is not a financial audit. The questions that must be answered are: Which of the objectives has the project achieved? What adjustments might be advantageously made to improve the operation?

Several facts should be noted. First, USAID and the Ministry of Health agreed that, because of an impending national strike, one full week would be cut from the consultant's schedule. Second, the summer schedule, 7:30 a.m. - 1:15 p.m., was not always conducive to comprehensive work. The project coordinator was relieved of his responsibilities on December 31, 1980. The person appointed to replace him will not be available until April. The consultant, therefore, did not have access to an important counterpart.

Objectives of the Project

In analyzing progress made to date, it is useful to keep in mind the six general objectives of the project, which are described in the Project Agreement. It is stated that services will be expanded experimentally by:

1. Procuring specific commodities for maternal and child health, nutrition, and population.
2. Training as many as 2,000 persons to distribute and use these commodities (approximately 1,700 will be resident community agents).

3. Teaching the agents the basic concepts of maternal child health and population.
4. Establishing a logistics and supervision system to ensure the availability, at all levels and at all times, of basic services and commodities.
5. Providing partial salary support for health professionals who are directly involved in the management and implementation of the system.
6. Using a simple registration and information system, the main function of which is to improve community effectiveness and supervision and to estimate the impact of the program on community health and technical administration.

A Regional Operational Plan was developed which further modified the objectives. In the new plan it was stated that at the end of the first year of the project, there would be 100 health posts and 100 trained promoters functioning in the region. At the end of the second year, an additional 400 promoters would be functioning.

Methodology

Following an orientation and review of project documentation, including financial data, the consultant traveled to the project's headquarters in Ica, Peru, where he took up residence. He analyzed the data generated by the existing information system to quantify the results obtained to date and conducted intensive interviews with health personnel at every level of the system. The analysis of data yielded information that was less useful than the consultant had hoped it would be.

It was impossible to examine the project in a vacuum. For all practical purposes, services are augmented by other inputs. Ultimately, the same service delivery system and supporting subsystems will be used throughout. For this evaluation, the consultant tried to isolate and focus on the specific objectives of the MCH/POP project. His recommendations in many cases apply to the entire integrated system, and not simply to the specific services addressed in this report.

Organization of Report

In this report, the consultant analyzes the state of the project, the objectives that have been achieved, the various services that are offered, and the various supporting subsystems that are needed to operate the system. Service elements are reviewed, major managerial issues are examined, and other supporting subsystems are reviewed. Specific recommendations follow each section.

III. FINDINGS AND RECOMMENDATIONS

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Maternal Child Health and Population Services

Among the MCH/POP services originally contemplated were:

- pre-, intra-, and postnatal services;
- family planning;
- well- and sick-baby clinics;
- supplementary feeding programs for mothers and children;
- control of intestinal parasitism and diarrheas;
- vaccinations for mothers and children;
- detection of cervical and breast cancers; and
- information and education for couples and the community in general on health and family planning.

Although these particular services constitute a major portion of the services being offered, they are but one part of the entire service delivery package and are designed for a relatively small percentage of the targeted population.

Pre-, Intra-, and Postnatal Services

It is probable that more prenatal services have been provided in the last 12 months, but it is unlikely that the increase is significant because most of these services are concentrated in hospitals, and at that level the project has had little impact. It is difficult to analyze trends for these services. The information format used in the first quarter was inadequate and was changed in the second quarter. Data from the third and fourth quarters have not been fully compiled. Only data for the second quarter are available, and services for that period were underreported. Data from 28 health posts--roughly 25 percent of the required information--are missing.

If one examines the data from the second quarter, one finds that approximately 50 percent of the prenatal consultations in the region took place in hospitals, and the other 50 percent in health centers and posts.

This figure includes health posts that did not report, and is adjusted to account for the fact that all ob/gyn consultations at those levels are lumped together. Later, as data for subsequent months become available, the percentages should shift gradually, with the balance falling to health centers. If indeed this does occur, it will be proof that extended coverage is beginning to take effect.

There was no opportunity to measure the quality of services, but the figures suggest that in Area 1 the average number of prenatal visits is approaching 5, a figure representing remarkable control. Most of the patients are, however, urban. The fact that they are city dwellers perhaps implies a relatively high degree of sophistication and easy access to services. In the more rural settings, the average appears to be one or two visits.

Recommendation 1

At health centers, the emphasis should be on the identification of pregnant women who should be convinced of the importance of regular prenatal checkups. A tickler file (chronological) could be kept to remind the nurse or sanitarian to follow up gestating women who fail to keep their appointments.

In the 1970s, 33 community-based midwives were trained in sanitary delivery techniques. They also received some basic equipment. The strategy was to improve the quality of existing services, and, it is presumed, this has been done, although given the almost total lack of supervision, this cannot be confirmed. The midwives have not been integrated into the health delivery system.

For the second and third quarters, Areas 1 and 2 reported 18 and 24, and 16 and 30, attended births, respectively. The data do not reveal who attended those births at the community health posts. It is clear, however, that most were attended by personnel from a small number of individual health posts. This suggests that a concentrated population has access to services delivered by persons with special capacities in this technical field.

The information on postnatal services is deficient, but it is known that the services are provided most often in hospitals. In the second quarter, for example, 95 percent and 100 percent, respectively, of women in Areas 2 and 3 who gave birth were later seen in hospitals. This implies that virtually no follow-up is being done at other service delivery levels. In fact, little follow-up is being done in hospitals; the number of postnatal patients who were followed up was reported to be 138 during the

quarter. No figure for total births exists because each hospital reports separately, but the number of births in the region was significantly higher than the number of women who received postpartum attention.

Recommendation 2

Each delivering woman should be seen at least once after she gives birth. Follow-up could be done at a hospital, or the woman could be referred to the health delivery point that, theoretically, was responsible for her entry into the system. If no follow-up visit has been recorded at the hospital, the hospital should inform the appropriate health delivery point that such a visit should be made.

Family Planning Services

After a large number of professional staff were trained in family planning techniques, family planning services were instituted in late 1979. In the early months, activity was slow, partly because of a lack of support from the military government. When a civilian government assumed power in July, FP services could be offered openly.

By the end of December 1980, at least 1,650 persons were enrolled in the program. This figure may be low, however, because data from Area 3 and other institutions were not reported.

Figure 1 depicts the growth of family planning in the public sector during 1980. Most striking is the continuously accelerating growth of the program. To fully understand why this acceleration took place, we must examine the program more carefully. The data on family planning services are reasonably good and complete, though they come from few service delivery points.

Figure 2 shows how entrants into the program are divided among hospitals and health centers. Through the third quarter, approximately 80 percent of all family planning acceptors entered through hospitals, principally, the base hospitals in each area. Some services were being provided by health centers. An intensive educational campaign was launched in Area 1 to expand the program into the rural areas. This effort was resisted strongly, and the program in fact pulled back. In the fourth quarter, a remarkable change took place: the number of hospital entrants decreased from 83 percent to approximately 65 percent. It was in this quarter that some health posts, particularly in Area 2, began to offer services.

Figure 1
FAMILY PLANNING PROGRAM GROWTH

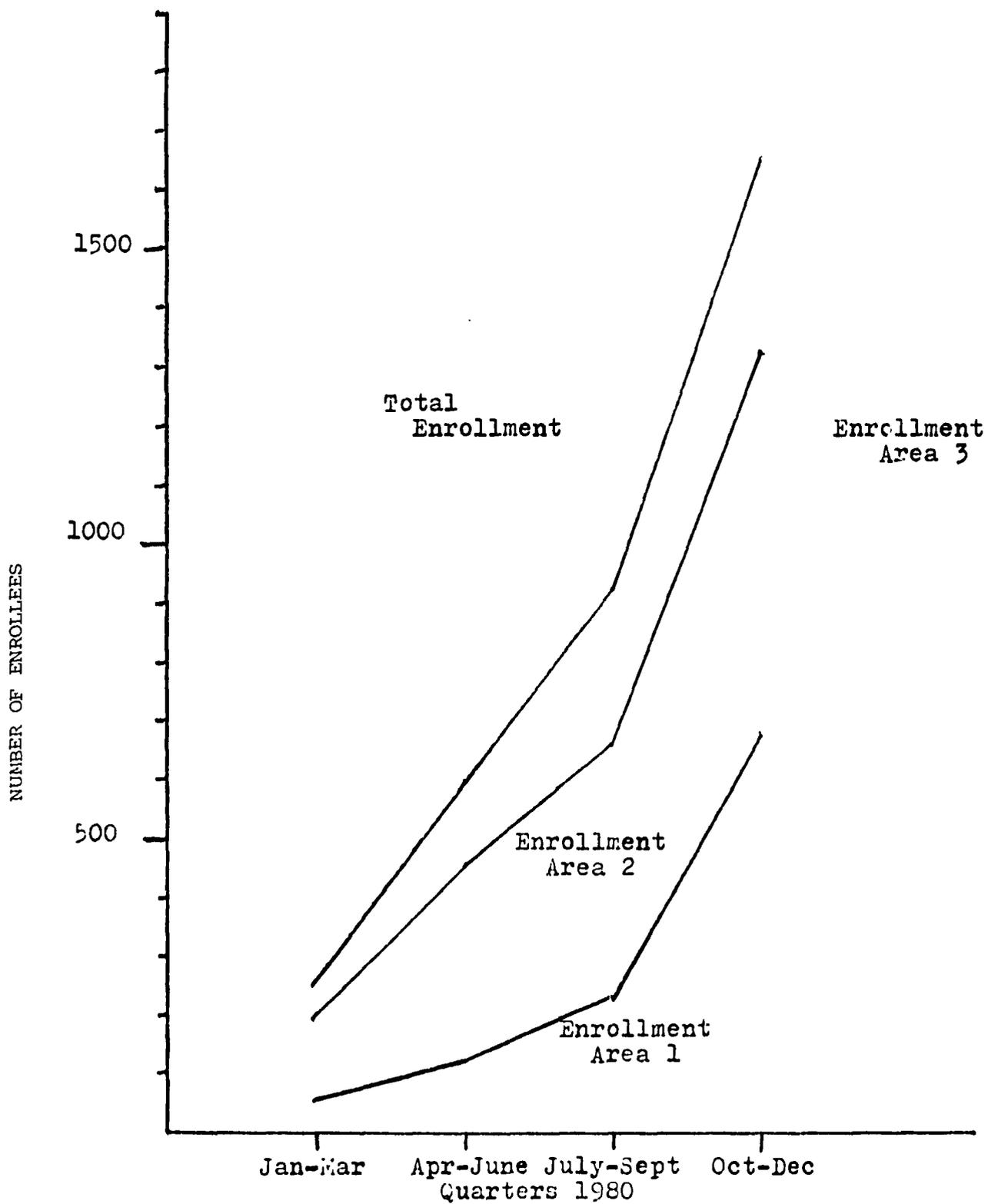


Figure 2

SOURCE OF FAMILY PLANNING PROGRAM ENTRY

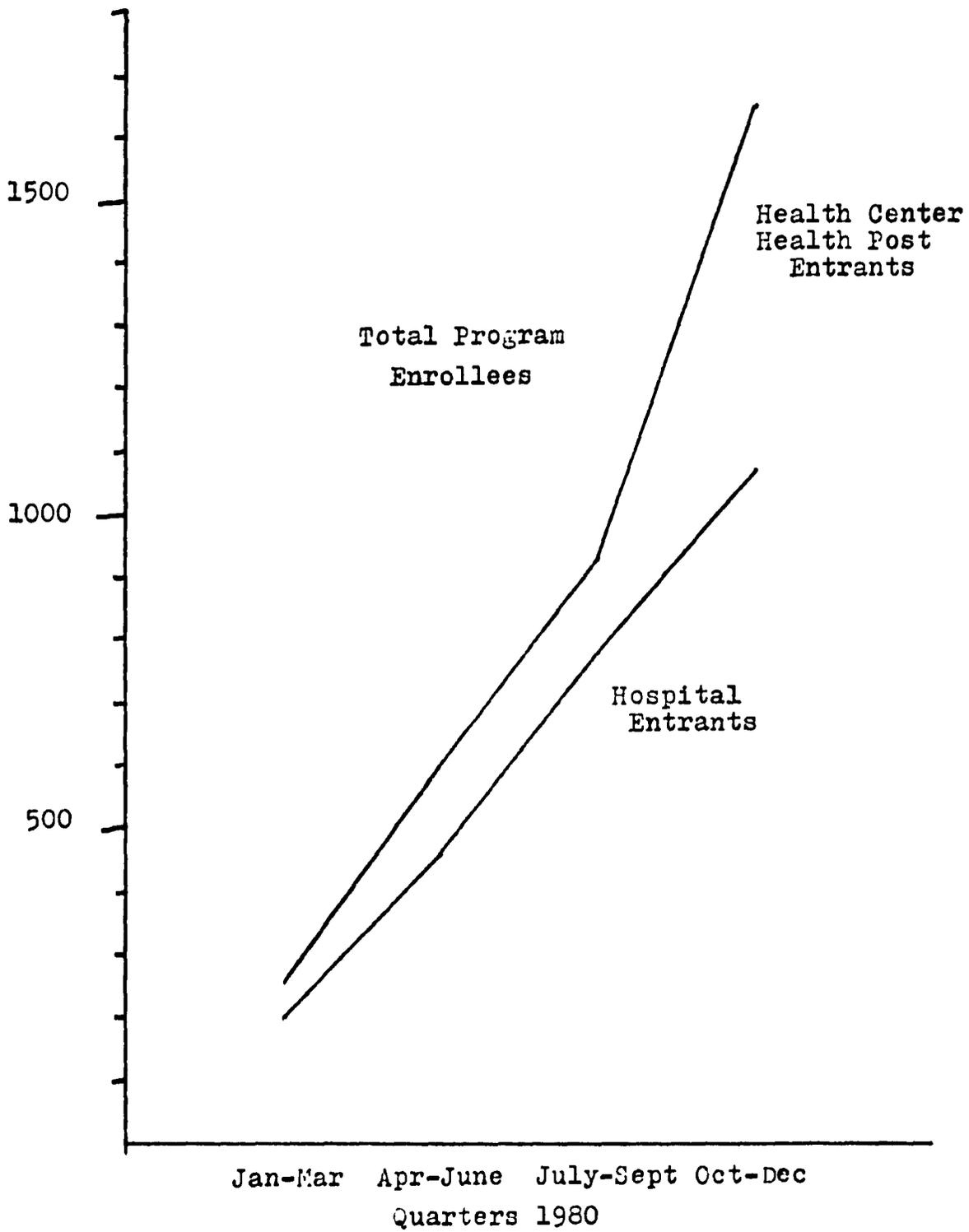


Figure 3 clarifies this situation. The regional hospital in Ica experienced rapid growth which then slowed and eventually came to a standstill in the last quarter, when hospital personnel called a strike. Puquio (Area 3) and San José in Chincha experienced nearly parallel growth--steady but unremarkable--through October. Data for Puquio has not been available since then. With the addition of a hospital clinic, San José nearly doubled its enrollment in the last two months of 1980.

Going back to Figure 1, the picture can now be completed. In the fourth quarter, rapid growth in Area 1 (Chincha) took place almost entirely in the hospital. In Area 2, services expanded in Palpa and were offered for the first time at the health posts. The expansion of services at health posts has been slow, but it is expected to accelerate.

The program in Nazca has just begun. Services in Socorro Hospital in Ica were cut off after doctors began to requisition for their private practices the family planning materials that had been donated and refused to see patients who requested that services be provided in public clinics.

One might speculate that greater growth might have occurred had there been no hospital strikes. As Figure 3 shows, the strike in June had an impact on all three base hospitals, and the strike in December influenced operations at the regional hospital in Ica.

Family planning supplies have been distributed to most health posts in Area 2. Data for the first quarter of 1981 should show a gradual initiation of services as a result. Most sanitarians who are receiving supplies have not been trained directly and formally by the program, although they have received from the program coordinator and his assistant brief instruction in the contraindications of each method. Sanitarians now receive pills, condoms, and vaginal tablets. The insertion of IUDs is left to professionally trained personnel.

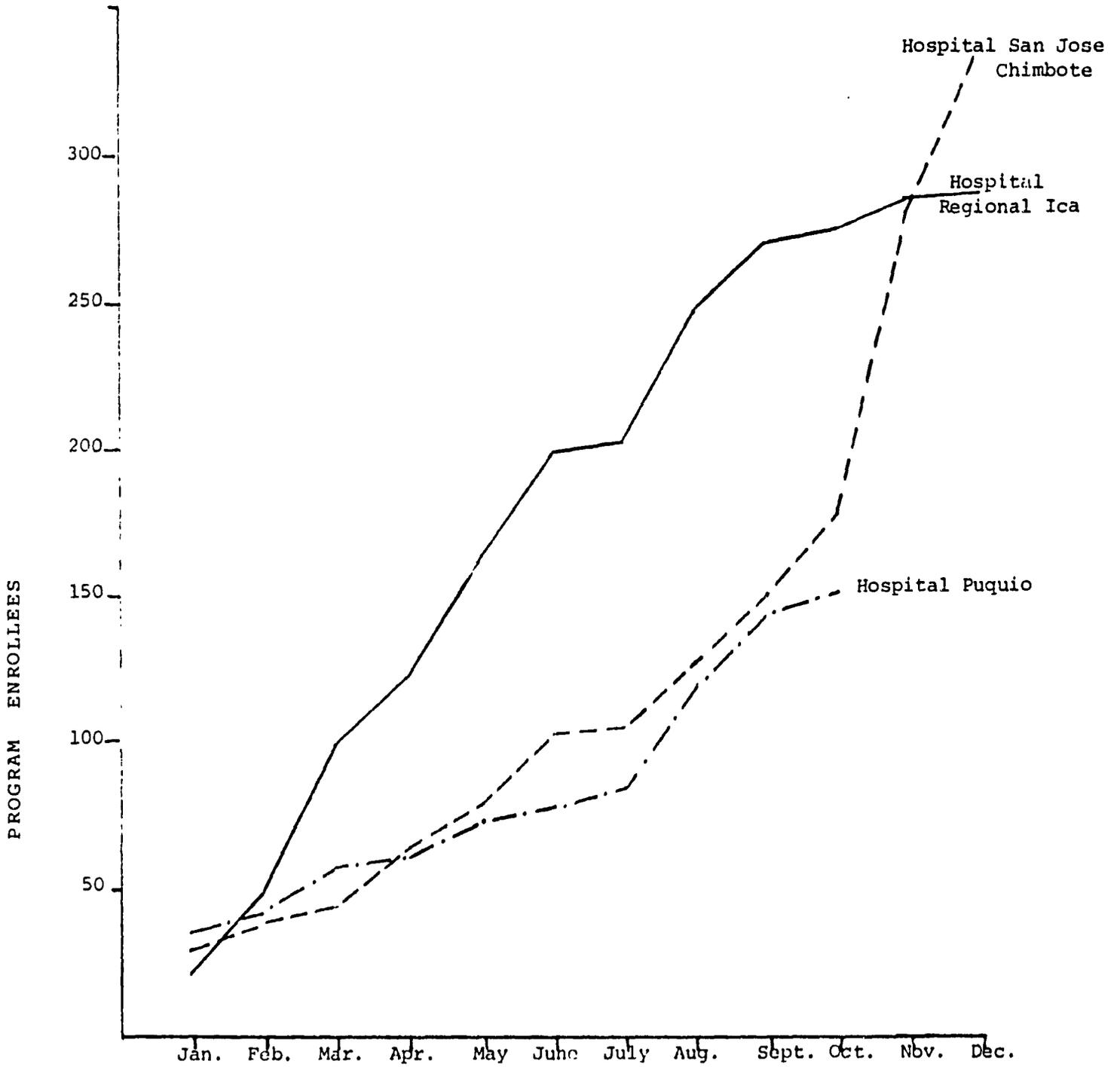
Table 1 shows the breakdown of FP enrollees and methods reported for the fourth quarter. The reader should be aware that nearly all the professional midwives who were trained to insert IUDs have left public service. As a consequence, IUD insertion continues to be done only in hospitals. With the initiation of services in rural areas, the number of pill users can be expected to increase.

Recommendation 3

The sanitarians and promoters who are working in Area 2 and who were not trained by the project should be trained in population family planning methods as soon as possible to facilitate the extension of this service component.

Figure 3

GROWTH PROGRAM WITHIN BASE HOSPITALS



1980

Table 1
FAMILY PLANNING ENROLLEES AND METHODS, 4TH QUARTER, 1980

HOSPITAL AREA	All Methods			IUD			Pills			Condoms			Minilaparotomy			Others		
	New	Drop- Outs	Total Active	New	Drop- Outs	Total Active	New	Drop- Outs	Total Active	New	Drop- Outs	Total Active	New	Drop- Outs	Total Active	New	Drop- Outs	Total Active
Area 1	397	39	692	53	5	171	156	12	269	116	18	139	-	-	-	72	4	113
Area 2	254	123	621	47	1	315	103	40	187	49	27	39	-	-	12	55	-	68
Area 3	58	-	337*	16	-	109	27	-	63	35	-	158	-	-	-	7	-	7
Regional Total	<u>709</u>	<u>162</u>	<u>1,650</u>	<u>116</u>	<u>6</u>	<u>595</u>	<u>286</u>	<u>52</u>	<u>519</u>	<u>300</u>	<u>45</u>	<u>336</u>	-	-	<u>12</u>	<u>134</u>	<u>4</u>	<u>188</u>

* Underreported.

Recommendation 4

The regional educational team should develop strategies and materials for sanitarians and promoters, particularly those in Area 1, so that they can attract acceptors to the family planning program. The purpose of these strategies should be to break down the resistance of specific groups, such as males, by dealing directly with identified concerns.

Child Care

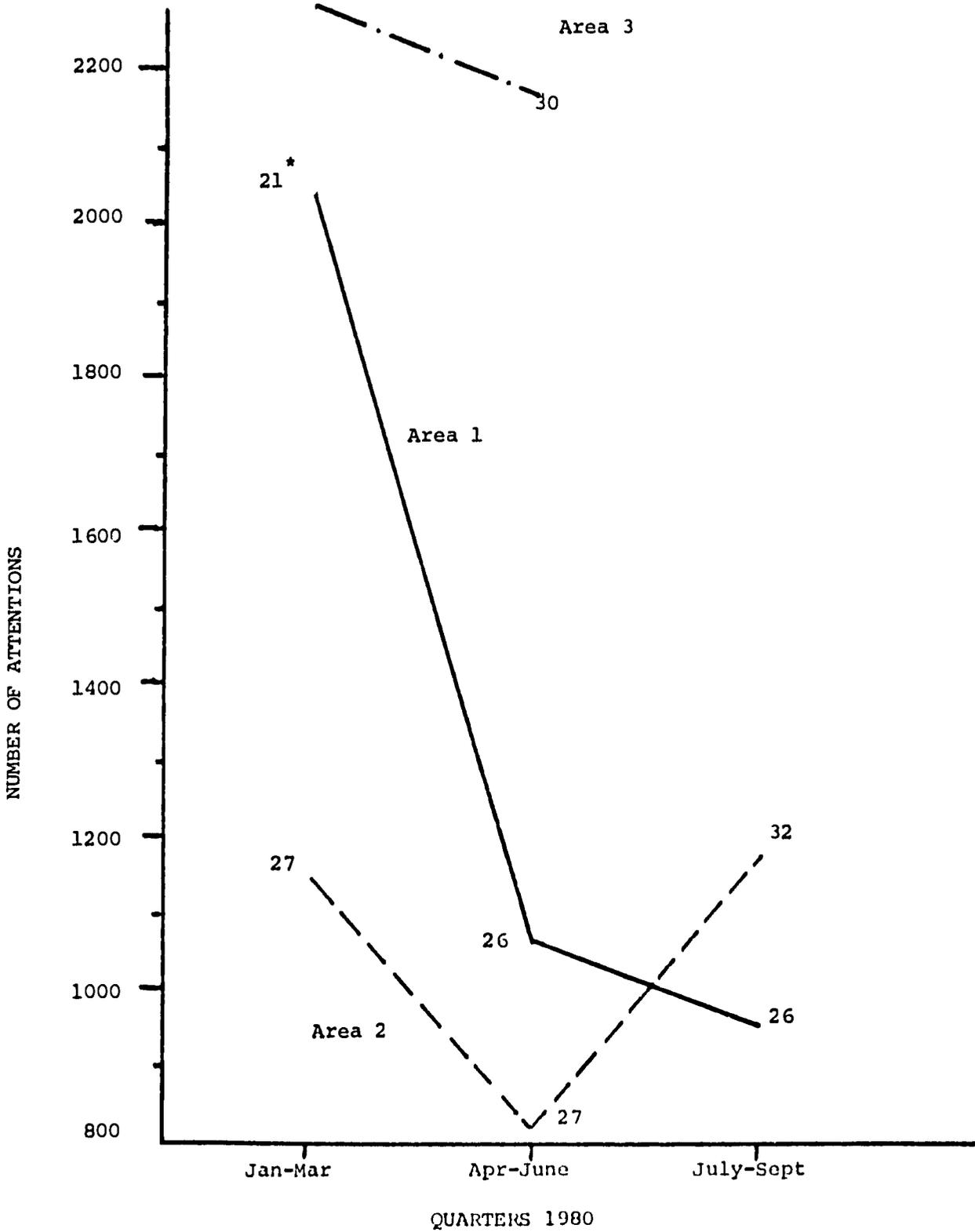
Figure 4 illustrates both the problems with the information system and the state of child care in the region. Although the number of health posts actually increased during the three quarters shown, services appear to have dropped significantly. Given the lack of training and the absence of standard definitions and reporting forms, one should not be surprised that sanitarians grossly overreported the number of consultations in the first quarter. In Area 2, the dip in the second quarter is attributable, at least in part, to underreporting. Curiously, many health posts reported that they did not see a single child during one or more quarters, a fact that is extremely difficult to believe. In Area 3, the number of child consultations is probably exaggerated; moreover, no data are available after the second quarter. In short, it is impossible to say, with any accuracy, what is going on at health posts in general, except that there seem to be more than 1,000 consultations per quarter in each area. This situation probably has not changed significantly.

Some control is being achieved through the supplementary feeding program, and at least some undernourished children are being identified in the urban areas. At the hospital level, the project has, once again, had little effect.

More than 100,000 packages of oral rehydration salts (ORS) arrived in September 1980. The packages had been stamped with the date, June 1980. This was thought to be the expiration date. The color of the salts changed slightly, and in January some samples were sent to Lima for analysis. The results have not been received. This delay has obviously disrupted the effort to rehydrate children who are suffering from diarrhea. It is characteristic of the lack of managerial follow-up to ensure that all details are handled well and contribute to the success of the program. (See Table 2.)

Figure 4

PEDIATRIC ATTENTIONS
(Health Posts)



* Numbers refer to the number of health posts reporting.

Table 2
HOUSEHOLD VISITS

Quarter 1980	Area 1				Area 2				Total*			
	1		2		1		2		1		2	
	Persons	Total Visits										
Maternal Care												
Pregnant Women	80	178	154	244	164	301	222	369	244	479	376	613
Postnatal	42	109	50	110	97	189	111	265	139	298	161	375
Child Health												
Lactating	82	173	178	249	174	392	239	423	256	565	417	672
Preschool	49	106	110	176	255	328	293	375	304	434	403	551
School Age	26	74	80	125	173	249	141	208	199	323	221	333

* Excluding Area 3.

Recommendation 5

More attention should be given to maternal health, using pre- and postpartum visits, and to the food program to identify problems of children. Sanitarians should make a special effort to work with local school teachers, who could make referrals and suggest useful sites for home visits. The theory behind this emphasis on maternal care is that most problems are likely to appear in the various family members, and not solely in a single child. Therefore, a large percentage of children's problems should be identified through contact with mothers or through referrals.

Supplementary Feeding Program

The supplementary feeding program, which is conducted under the auspices of the Seventh Day Adventist World Service, is operating with limited supplies in Area 2 (Ica). Food rations are being distributed from four health centers and nine health posts to enhance the nutritional intake of needy gestating and lactating mothers and preschool children, and to attract mothers and children to the clinics.

The World Food Program (WFP) operates a small program at the principal hospitals in the region. One health center in Area 1 also is a distribution point. At least two more such distribution sites are planned. In February, regional authorities, OFASA (Adventist program), and the WFP reached an agreement that the WFP would expand to the Guadalupe Health Center and its two subsidiary health posts, freeing OFASA, which earlier distributed food from those points, to expand to other sites.

The OFASA program began in April 1980 in the health centers, was expanded to the peripheral urban areas in July, and to health posts, most of which should be considered to be urban or suburban, in October.

The following rations are provided to each recipient:

- 1.3 kg rice
- 1.0 kg CSM
- 1.0 kg WSE
- 0.9 kg powdered milk
- 0.4 kg cooking oil

In a given family, there may be as many as three rations. An effort is made to provide more rations to fewer families in need to solidly improve these persons' nutritional status.

Food is distributed from the health centers and posts. The responsibility for this task has been delegated principally to nurses or sanitarians. These health workers are assisted by other clinic personnel, such as auxiliaries, but in some cases they themselves devote considerable time to the routine tasks of weighing and distributing, and sometimes packaging, the rations. Clinic staff are trained to perform other functions, thus this activity results in a waste of otherwise valuable resources.

Program personnel are expected to participate in education projects. In February, OFASA sponsored a week-long seminar for approximately 40 program personnel at all levels that concentrated on nutrition and food preparation. This course will, it is hoped, be a model for future educational efforts directed at the recipients themselves.

An elaborate system to identify recipients has been designed and implemented, and food is probably reaching a large percentage of the targeted population. To identify and follow up cases, a nurse or sanitarian visits homes. This activity supposedly takes up 50 percent of these workers' time, but less time is probably required, at least after the recipients have been identified. It would be unrealistic to expect clinic personnel to devote so large a percentage of their time to the food program, even though they can combine other activities with the home visits. At least some portion of the time they now spend on food-related activities will have to be devoted to supervisory activities once the delivery systems become fully functional.

In addition to satisfying the selection criteria, recipients must attend the monthly meetings that are held before rations are distributed. At these meetings the recipients learn how to properly prepare the donated foods, but are taught little else.

Food is prepared in the home, where, in most cases, it is used to supplement the family meal. Rarely does it reach the targeted population. This and the fact that a given family participates in the program for a short time mean that improvement in nutritional status is temporary.

A system to measure the impact of the food program on nutritional status has been designed. If strict control is maintained during distribution or home visits, it may be possible to exert additional pressure to ensure that rations reach the targeted population.

The program is too new to effect significant changes in the nutritional status of recipients. Furthermore, it is not possible to identify the status of mothers and children at some point after they leave the

program to fully evaluate mid-term impact. And, in any case, it is unlikely that the staff who are responsible will be able to do more than spot-checking.

The WFP operates almost exactly the same as OFASA, except that it distributes food primarily from urban hospitals, while OFASA tends to concentrate activity in the suburban and peripheral areas. Both programs aim to meet the needs of populations in need. Interestingly, in neither is the lack of access to foodstuffs considered in the need formula. All the areas now served by both programs are either urban or semi-urban or agriculturally productive areas where an abundance of foodstuffs is available.

Two components of the identification process are home visits and interviews. The approach is to identify those who are in need and who have a health problem. Clinic staff claim that attendance at health centers has increased as a result of the food distribution program. The rations are an incentive, attracting to the clinics people who otherwise would not attend. Some who are in need do not attend clinic sessions unless they receive a handout, but this group is probably small.

What are the benefits of the program? The nutritional impact is questionable, and the program's contribution to other health components is probably insignificant. The only significant benefit seems to be gross savings and the rechanneling of disposable income of recipient families, a portion of which would have been spent on replacements for donated foods.

If the program were to be cut off tomorrow, what would happen? The short-term improvement in the nutritional status of recipient families would be offset, and those same families would have to spend more at the market. They also would probably resent losing the food subsidy.

These effects aside, the food rations can be used in other ways to benefit the recipients. Mothers' clubs, for example, could be formed to stimulate community organization and participation, to enhance women's status and rights, and to promote a wide variety of development activities. The clubs would serve a captive audience for which useful educational activities might be initiated. Nutrition and food preparation could be promoted, and an almost limitless number of other health-related topics, such as hygiene, mother and child care, vaccinations, environmental sanitation, family planning, and homemaking (sewing, weaving, etc.) could be discussed. Furthermore, when food supplements are provided, families have more disposable income. Rather than buying food, mothers could be encouraged to contribute a fixed sum to the club fund each month. The amount could be set by the mothers themselves. The members of the club would thus be generating capital for useful, common projects that could not be financed otherwise.

The clubs could determine how to use the accumulated capital. This activity could, of course, be linked directly to the food program. For example, money could be used to buy land, animals, and agricultural equipment; as more food is grown locally, dependence on donated foods would be reduced. Rarely does this occur, however. More often, depending on the size and sophistication of the club, sewing machines or looms might be purchased for common use or consumer cooperatives might be created. Health programs might be created or subsidized. In large urban programs, a small contribution from recipients might be sufficient to finance the operating expenses of a clinic. In other cases, funds might be used to purchase drugs, pay promoters, or furnish a health post. The limits are, simply, the amount of capital available, access to external assistance, and imagination.

Food rations are an incentive to form mothers' clubs, and they may be the sole reason for the clubs' existence. One successful program in Bolivia insists that mothers' clubs meet regularly three to six months before rations are received. This ensures that the clubs meet other needs and serve useful purposes.

In summary, the program is probably reaching the targeted group in specific urban and semi-urban areas, but its long-term benefits are questionable. The same rations may, however, be used to provide additional benefits.

Recommendation 6

Those who receive food rations at a given distribution point should be organized into formal mothers' clubs. The members should be required to contribute a fixed sum each month to a common fund which could be used to finance community development activities, including supplementary feeding programs or other health projects.

The clubs should be formed in areas where food is already being distributed. Recipients who are unwilling to contribute to the common fund should be dropped from the program and replaced by others equally in need but willing to participate fully. Communities that are unwilling to establish a club should also be replaced.

Recommendation 7

The mothers' clubs should be a principal target group for health education efforts of all kinds.

Recommendation 8

Additional rations should not be distributed or the number of distribution points expanded until mothers' clubs are established at existing distribution points.

Recommendation 9

In expanding distribution points, the existing pattern of radiating outward from urban areas to the periphery should not be followed. Instead, the program should be expanded into those rural areas where there is a demonstrated nutritional need and where access to foodstuffs is limited. Obviously, the logistics of such a distribution network must be designed. The distribution of food could be combined with the delivery of other services.

Recommendation 10

The responsibility for packaging and distributing rations should be given to the mothers themselves, coordinated through the mothers' clubs, or shared among the mothers (rotate the responsibility). Clinic personnel could supervise the effort.

Control of Intestinal Parasitism and Diarrheas

No specific activities have been indicated to control internal parasitism and diarrheas. Manuals on the subject have been prepared for promoters, but these workers have yet to begin control projects. Furthermore, there has been no attempt to help promoters communicate the information in the manuals to their communities.

Recommendation 11

The manuals on internal parasites and diarrheas should be condensed and the information summarized in flip charts or other expository materials for promoters and sanitarians. In this way, the project can more fully capitalize on the tremendous investment in the manuals.

Vaccinations

Table 3 shows the number of vaccinations administered in the first half of 1980. The figures may be assumed to be accurate, because in the absence of an adequate cold chain, an extensive vaccination program could not be administered by other than hospital teams. Figures for the second half of the year have not been compiled.

In this effort, house-to-house campaigns have been launched to achieve complete coverage. The incidence of transmissible diseases has not been reduced, however, perhaps because necessary second boosters have not been provided. A change in strategy may be required.

The ultimate objective is to extend this service to the health post level. But at every level the logistical system and refrigeration facilities are inadequate. Without refrigeration facilities, this objective is not feasible and cannot be achieved except through organized campaigns.

In January, in conjunction with PAHO and WHO, the project sponsored a course in vaccination techniques. Personnel in Chíncha attended the course. Additional staff may be employed shortly to assist in future efforts.

Recommendation 12

Experts from the Ministry of Health, PAHO, or WHO should be requested to assist the region in redesigning a detailed vaccination strategy.

Detection of Cervical and Breast Cancers

Gynecological services are dispensed almost exclusively by specialists located in hospitals in Areas 1 and 2. Of the 198 Pap smears taken in the second quarter in the region's public sector, 188 were taken in the two base hospitals. None were reported for Area 3. Presumably, some of the patients at these hospitals were referrals from other doctors stationed at health centers and health posts.

Gynecology is not emphasized. It is possible that most gynecological patients are seen privately. Throughout the Region, 1,209 patients were seen in the second quarter, for a total of 4,514 consultations. This is an average of 3.7 visits per patient. Follow-up within the public sector appears to be high.

Table 3
VACCINATIONS

<u>Quarters*</u>	<u>Area 1</u>		<u>Area 2</u>		<u>Area 3</u>		<u>TOTAL</u>	
	<u>1^o</u>	<u>2^o</u>	<u>1^o</u>	<u>2^o</u>	<u>1^o</u>	<u>2^o</u>	<u>1^o</u>	<u>2^o</u>
<u>Infants</u>								
BCG	1,439	3,684	1,364	1,678	79	273	2,882	5,635
Polio	5,973	6,249	3,672	3,766	83	1,894	9,728	11,909
Measles	2,116	3,385	1,385	1,672	17	631	3,518	5,688
Triple	5,512	6,055	1,767	2,545	159	1,407	7,438	10,007
<u>Everyone</u>								
Typhoid	2,426	320	1,735	1,349	97	146	4,258	1,845
Tetanus	8	113	452	604	-	-	460	717
Other	200	178	2,968	29	1,171	-	6,139	207

* Data for third and fourth quarters have not yet been compiled.

Recommendation 13

The director of Area 3 should determine why there is no program to detect cervical cancer in the area, and he should try to establish mechanisms to facilitate the introduction of such a program into the area's hospitals.

Information and Education for Couples and the Community

Although much effort has been expended to educate personnel in the program, little knowledge has been communicated to specific couples or to the community at large. There is reason to establish a community program. It is not clear, however, how efforts can be redirected toward specific community groups, as opposed to program personnel.

This project has benefited from the presence of several full-time health educators and a full-time artist. These resource persons might be employed to develop an appropriate technology and well focused marketing strategies for efforts involving specific community groups. Their role would be to provide technical support to field staff, and not to train personnel. A far more effective program could be developed by providing field staff with well thought out and prepared materials, and by explaining and demonstrating use of this information.

The Ministry of Health has designed posters that advocate responsible parenthood. These posters may be seen in many health centers and health posts. They are attractive decorations, but they do not sufficiently capture the reality of the campo to effect any behavioral change. Similar posters might be designed using the same drawings and concepts as are found in manuals for promoters. Family planning, diarrheas, and parasitism might be emphasized.

The development of manuals for promoters points to a lack of managerial control and analysis in the program. Though the manuals are well conceived and have been adapted to the specific requirements of the region, they cost approximately S/2,000 per copy to print. (The cost is less than one might have expected because there was a stockpile of paper and numbers of printers were contacted before publication and the lowest bid accepted.) In addition, at least S/1,000 should be added to the cost of printing the first 500 copies to cover staff time. This would bring the cost of the first manuals to S/3,000, or, at the present exchange rate, approximately \$10.50 per copy. As more copies are printed, the development cost per copy decreases, but that reduction is offset by inflation.

The point here is that an educational effort of this magnitude should have begun with an analysis of the costs and benefits of various alternative strategies. Obviously, no such analysis was made. Commercial manuals that contain more information currently retail for \$6.00. Staff time could have been spent on other projects, such as the production of materials for use in the communities. Because the manuals were not completed on time, the investment has been lost. It is too late to pull back and reconsider the strategy at this time.

Recommendation 14

Under the guidance of the regional director, health education staff should develop strategies and priorities for health education efforts in the communities. Simultaneously, they should deemphasize training of program staff.

Recommendation 15

The manuals for promoters should be completed and printed as soon as possible.

Recommendation 16

No program activity that is likely to require large investments of staff time and resources (e.g., preparing educational materials) should be undertaken until the costs and benefits of various alternatives have been analyzed thoroughly and a strategy has been selected to achieve maximum benefit from an investment within a given budgetary range.

Organization and Management

The project, and thus the health system, fit within the well established administrative system of the Ministry of Health. Progress is being made and some control is evident, but in general everything is moving forward in an uncoordinated way through sheer inertia.

There is evidence of disorganization at all levels of the system. Alleviation of any single one problem will necessarily relieve the tensions created by the others, but it is difficult to improve one area of weakness without effecting corresponding changes in other areas.

A. Theme 1: Integration of Sub-Programs

To fortify existing government services, external aid has been channeled into the system. Major projects with specific goals and foci have been instituted. Among them are the MCH/POP Project and the Primary Care Project, both of which are financed by USAID, and the supplementary feeding programs. Each has been layered onto the other, with little effort to integrate any into the entire system. One result has been the creation of a dichotomous system. Although essentially the same personnel delivered both MCH/POP and other primary care services, the two concepts were developed separately, creating confusion about priorities and responsibilities. This problem was not in the least diminished by the organizational separation of MCH from primary care at the ministry level.

Both USAID and the Ministry of Health recognized some time ago that the establishment of two or more parallel systems would be ineffective and they declared that all programs should be integrated. To date, however, little has been done to ensure that integration, primarily because the administrative hierarchy is weak and there has been no concerted effort to integrate specific subsystems (e.g., information, supplies, and supervision). The problem is further aggravated by non-integration of activities at the national level.

Staff at the upper levels of the regional hierarchy are committed to the concept of integration; in fact, they do not readily distinguish between one program and another. The regional director has been consistent in his desire to see that all aspects of the program are integrated. Nor do staff at service delivery levels make a sharp distinction between services. But supervisory personnel, at the direction of the area directors, still tend to focus on particular program components, and they are neither well integrated nor as coordinated as they might be.

The organizational structure of the regional and area offices has also hampered efforts to integrate programs. The dichotomy is best illustrated by the payment of personnel in the PROSMIP program. Contracting personnel have enjoyed an advantage, allowing the system to expand more rapidly than would have been possible otherwise. The effects of this action appear to greatly outweigh the short-term benefits. The major advantage is that the government can postpone salary payments by phasing payment over a maximum of three years.

The various contractual arrangements have had a number of different effects.

- Some personnel in the system believed that PROSMIP staff who were under contract were receiving two

salaries, one from the Ministry and one from the project, were receiving excessively high salaries, or were being paid in dollars. These rumors tended to discredit contract personnel in the eyes of their colleagues and hindered the ability of all staff to work together. Valuable support was apparently withheld at upper levels for the same reasons.

- The facts are quite different. Contract salaries are often lower than those of ministry personnel. Furthermore, contract personnel do not enjoy long-term job security, nor do they receive other benefits associated with regular government employment. Turnover has been extremely high in certain staff categories. For example, 15 of the 16 midwives who were trained in family planning have left the system for more lucrative employment in the private sector.
- With the shift from contract to government employment, there has been considerable uncertainty among contracted deliverers of services about the payment of salaries and job security. This uncertainty negatively affects productivity. Moreover, it is a result primarily of government delays in providing the agreed-upon counterpart funds.
- The lines of authority are confused. "Primary health" personnel often refuse to respond to directions from PROSMIP personnel, and vice versa.

The decision on salary payments has resulted in the total disequilibrium of the project budget. In fiscal 1980, 17 percent of the operating budget was to have been expended on salaries; in fact, 61 percent was expended. Even if salary payments are cut by one-third, the figure projected for 1981 will not be much less because of extreme inflation.

In summary, there is duplication, confusion, and underutilization of resources. The process of integration has not been successful. What is needed is a well defined plan of action to achieve complete integration.

Recommendation 17

With the guidance of the regional director, regional and area staff should draw up a plan of action to fully integrate the various programs. Specific program subsystems should be

examined to determine and ensure the compatibility of inputs and outputs from and for existing external projects. The sub-systems for supplies, information, supervision, references, and training should be examined so that an integrated system, satisfactory to all concerned, will be produced.

Recommendation 18

Despite the internal financial weakness of the government, USAID should continue to phase out the contracted personnel covered in the Project Agreement. Ultimately, service expansion may be slowed, but it is better to cut back than to force the government to institute a system for which it is unable or unwilling to assume full operating responsibility and cost.

Recommendation 19

With several minor exceptions, the salaries of personnel in future projects should not be covered by project funds. This approach has few long-term benefits and causes a number of short-term problems.

Recommendation 20

PROSMIP is a separate project and its budget should be reduced. The majority of the remaining funds should be transferred to the Primary Care Project. To minimize administrative duplication, only salary payments should continue to be provided under the present project.

There are a number of reasons for this suggestion. One, the principal interest in the near future will be the actual integration of the two programs. This is the implementation policy of the regional director, and steps are being taken to achieve this goal. Two, it makes little sense for program administrators from both USAID and the government to respond to certain program requirements (e.g., reporting and financial accounting) as though they were separate programs. This consultation is an example. The consultant was asked to evaluate the PROSMIP project, but to ignore primary care activities that take place at the same time. The evaluation thus is an

incomplete picture of the entire system. Nevertheless, most of the conclusions are valid for the system. It is hoped that a subsequent evaluation of primary care activities in the region will fill in the gaps, and not duplicate the entire process.

Sur Medio was to be a testing ground for a national service delivery model. Significant financial resources were allotted for this purpose. But because implementation has been delayed, other regions have made more progress than Sur Medio and, as a consequence, the allocation of extra resources to support a pilot project cannot be justified. Most of the material investment required to implement the system has been made. In fact, Sur Medio will be hard-pressed to spend to optimal ends all the remaining project funds by the time the project ends. As an alternative, therefore, project funds should be transferred to the Primary Health Project, where they would continue to be available to the Sur Medio Region and to other regions that need additional financial support.

B. Theme 2: Implementation of Administrative Hierarchy

The lack of an administrative hierarchy is probably the most significant feature and problem of the system at this time. An administrative structure, with defined responsibilities at each service delivery level, exists on paper, but to date it has never been built.

Where there is no structure, problems arise.

- The lines of authority are not always clear.
- Personnel in the institution which is theoretically responsible for supervision provide little or no support at any given service delivery point. Normally, support for materials and logistics, administrative support and technical and psychological support, which emanate from regular, good-quality supervision, should be provided.
- Considerable time and effort are wasted when service delivery personnel must seek the materials they need to perform their functions.
- The flow of information is slow and haphazard, and the process is not standardized.

In short, staff, particularly in the peripheral and rural areas, are hindered by the lack of a support system. Personnel at each service delivery point tend to limp along as best they can, independent of all others.

Recommendation 21

The gap in the system can be alleviated. The following steps should be taken.

1. The hierarchical system (the supervisory system) should be meticulously examined to determine whether its geographical proximity, access to logistical support, and span of control are adequate. No one supervisor should be responsible for supervising more people or institutions than is reasonable to achieve a prescribed level of quality.
2. The regional director should hold a series of meetings, first with the area directors and their assistants and then with staff at each level, to define and clarify administrative responsibilities at all levels and within each subsystem. Obviously, the first step should be to design the components of each subsystem. The purpose of the discussions should be to determine whether further clarification is necessary. The responsibilities of a given category of personnel may vary from area to area, and even within a given area, depending on the resources available and requirements of the project.
3. The regional director should then issue a directive indicating that the agreed-upon actions will be taken. Staff who ignore the hierarchy to expedite their requests should be referred to the proper level, and not be served (assuming the mechanisms for meeting their needs are established at the immediately responsible level). Upper-level personnel must respect and not cross over into the decisionmaking realm of their subordinates.

4. Those who have hierarchical relationships should meet at least once a month to further clarify responsibilities and expectations, and to exchange information. This procedure should continue indefinitely.

C. Theme 3: Administrative Structures for Regions and Areas

Historically, the administrative structure at regional and area levels has hindered effective decisionmaking and program control. The present structure is depicted in Figure 5. To a considerable degree, this structure reflects the generalized pattern of the Ministry of Health, and it is not necessarily easy to modify.

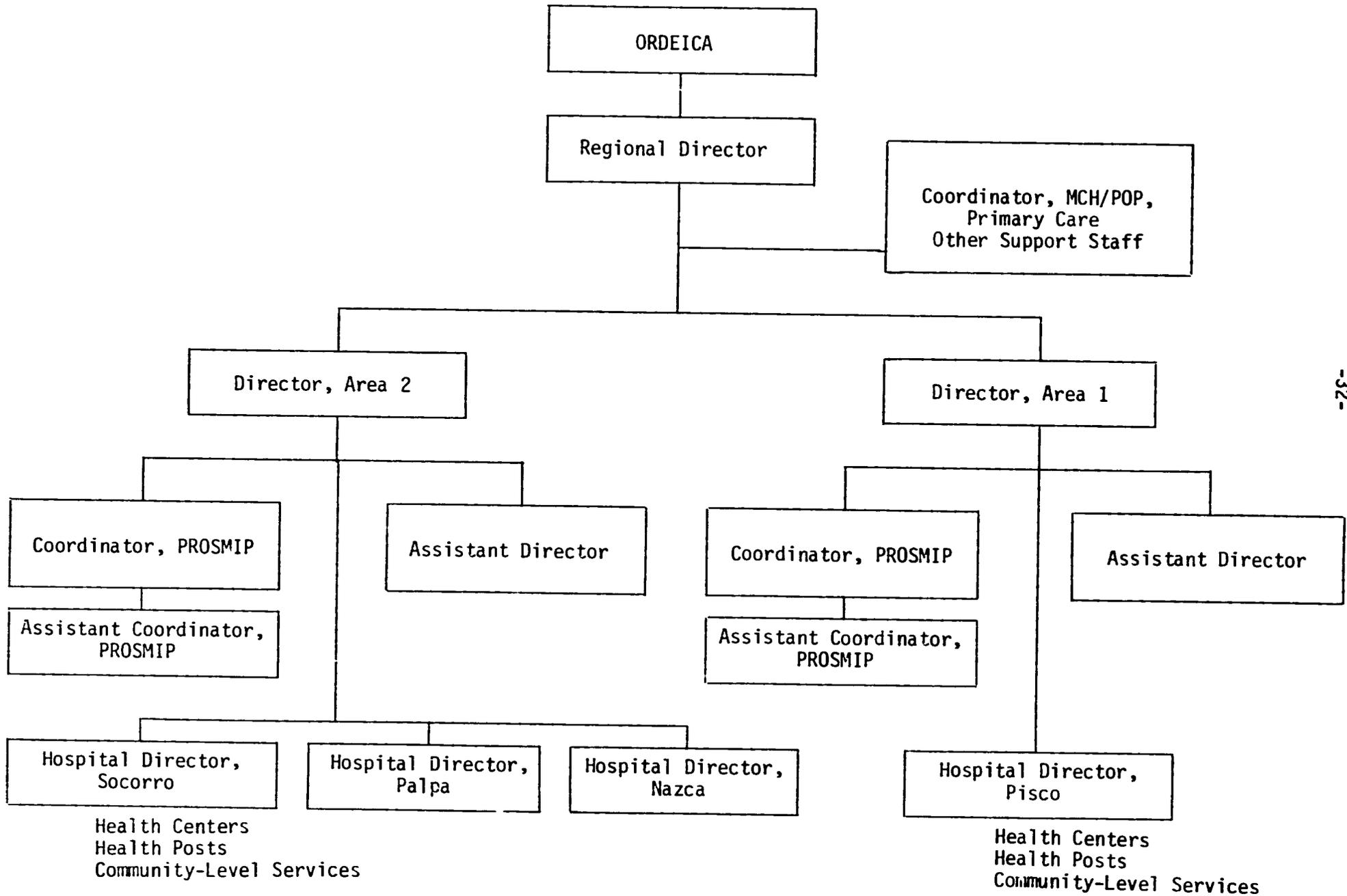
A principal problem of the structure is the large number of responsibilities delegated to area directors. These persons are responsible for all public sector health activities, including the general development and management of peripheral services. In this period of change, more than one full-time person is needed to adequately develop and implement the numerous required innovations. The area directors also are directly responsible for managing the base hospital in their respective areas. This, too, is a full-time job.

ORDEICA, the central government planning and coordinating body in the region, has recognized the impossibility of performing these dual roles and is proposing a separate director for the hospital in Area 2 at a hierarchical level parallel to the area director. If such an appointment were made, the area director would be relieved of some of the burden of his position, and the individual components of the system would be managed more effectively. However, the base hospital would be cut off from the rest of the system. If two people direct the area and no one has final responsibility or authority, there will most likely be conflicts over the distribution of resources for the base hospital and all other services and for the hospital and the peripheral services for which it is theoretically responsible. The regional director would eventually be obligated to intervene to settle the conflicts.

A similar situation exists in Pisco, where the director of the hospital refuses to follow directives for a variety of reasons and does not support peripheral services in any way. This puts a strain on the rest of the system, and makes it almost impossible to develop and implement a functioning administrative hierarchy. The same situation will present itself in Ica, should ORDEICA proceed to make its intended appointment.

Figure 5

PRESENT ORGANIZATIONAL STRUCTURE



Clearly, a full-time person is needed to manage the peripheral services and the base hospital. The area director has other coordinating and supervisory functions, including direct supervision of all hospital directors and staff who report directly to him. The area director must be a representative, assist the regional directors, implement general policy, and conduct planning and committee meetings. His workload seems to be particularly onerous, even without the other activities described above.

As Figure 5 shows, area directors enjoy only the direct support of other hospital directors in their respective areas. In some cases, in Chincha for example, there is no support at all. Historically, the assistant directors have been problem-solvers and have given support to the director. No single set of responsibilities has been delegated to them. All authority and decisionmaking have thus remained in the hands of the area director, and this has undercut the potential effectiveness of the assistant director.

In part, the structure reflects existing external programs; it was not designed to support and control service delivery activities. Thus, PROSMIP and the Primary Care Project have had separate coordinators, and the latter project is one of the activities of the assistant directors. The coordinators have no specific decisionmaking powers and, particularly at peripheral service delivery points, they are in the awkward position of having to supervise their own technical specialty. The person or persons they supervise normally conduct a wider range of activities than they themselves. Undoubtedly, loyalties are confused and relationships strained at service delivery levels. Personnel are responsible to a number of bosses, each with his own set of interests and priorities.

Having recognized the need to improve supervision, the area directors are thinking of assigning only the responsibility for technical supervision. Specialist medical personnel would be responsible for ensuring a "reasonable" quality of service delivery in their own specialty. Though useful and important, this method ignores the fact that the people who are being supervised must still report to a variety of specialists. Furthermore, if supervision is limited to technical areas, the area directors will not receive the administrative support they need.

Responsibility for all peripheral services in Area 2 has been delegated to the assistant director. Assuming that this person also has sufficient authority to make decisions on his own, without deferring to the area director, one may conclude that a positive step has been taken and that this approach may be an example to others who must solve similar problems. One question remains, however: Has the person been relieved of enough activities so that he can concentrate on the implementation of the system in the rural areas?

A common complaint in the past was that the assistant directors were ineffective in performing their assignments. This is not inexplicable. These persons have a variety of jobs to do, but they have neither a solid area of responsibility nor delegated authority to carry out their duties. If wide-ranging responsibilities are defined, and authority delegated, the area director should be able to group together assistant directors where need is demonstrated. In the Sur Medio Region, the use of two assistant directors is justifiable. One is needed to set up and manage the peripheral services, the other to manage the base hospital. The assistant directors would provide the kind of support specified in the ORDEICA proposal, but the approach itself would have none of the drawbacks.

This kind of arrangement is needed for another reason. The coordinators of technical programs are part-time employees. No matter how motivated they are, they simply do not have the time they need to manage peripheral services. Whatever power they do have is delegated to their assistant coordinators, who, though intelligent and well motivated persons, have little status in the system. Furthermore, under the present organization, they are obliged to do a wide variety of tasks which should be the responsibility of others in the system.

At the regional level, a similar but probably less serious situation exists. The two principal subordinates of the regional director are the area directors. If they were well organized and supported, less assistance would be required from the regional level.

At this time no one is coordinating services in the peripheral areas. The regional director decided that the coordinator should serve in an advisory capacity rather than assume specific responsibilities. He based his decision partly on the inability of the former PROSMIP coordinator and the current director to work well together. The person who has been appointed to replace the PROSMIP coordinator has no public health or management experience, and he will not readily gain the respect of other senior officials who have long worked in the system.

Recommendation 22

The assistant directors in each area should assume full responsibility for the development and management of health care delivery at health centers and health posts and in the communities. They should be responsible for expediting the development and implementation of the various supporting subsystems that are needed to make the services function effectively.

Recommendation 23

The coordinators of the MCH/POP component should continue to be responsible for the quality of those services. They should work with the assistant director to effect any necessary changes.

Recommendation 24

The assistant PROSMIP coordinators should support the assistant directors in their efforts to organize and manage the peripheral system.

Recommendation 25

The proposal to name the area director to the position of hospital director should be rejected. An additional assistant director should be appointed to the base hospital in each area.

D. Theme 4: Administrative Responsibility for Area 3

Despite its geographical proximity to the Sur Medio Region, Area 3 is, for political reasons, no longer part of the region. Its responsibility for support has been shifted to Ayacucho. This makes little sense administratively, because personnel must travel through Ica to reach Ayacucho.

This problem could persist for some time. Therefore, it is imperative that the various parties, particularly the two regions and the parties at the national level, reach an agreement. A change in responsibility will lend credence to the effort to integrate the present project with the Primary Health Project now under way in that province.

E. Theme 5: Global Planning

There is a lack of project planning. Some facets, such as training, have greatly outpaced others, creating disequilibrium in the system

and frustration among staff. Ideally, all the components that are needed to make the system function should be in place at approximately the same time. A fundamental rule is that the absence of any significant input will disproportionately affect how the system functions. Maintenance is an example. If vehicles are not maintained, the entire logistical and supervisory system will break down.

Recommendation 26

Regional and top-level area staff should examine the current program and future short- and medium-term activities and responsibilities to fill in the gaps in the present program. Planning techniques, such as PERT and Gaant charts, should be used. Supervisory personnel should use those techniques to monitor and adjust progress.

F. Theme 6: Non-Technical Influences on Management and Development

The implementation of this project was influenced by a set of circumstances that bear little relation to the technical development of the system. Affiliation with a political party was one factor. The change of regional directors may be attributed to politics. More important, and more difficult to document, is the influence of party affiliation on project development and cooperation. More often, party affiliation, and not administrative responsibility, affects efforts to develop projects.

The problem is compounded by the covert opposition or hesitation of several project leaders who are responsible for promoting and expediting project activities and who regard the expansion of family planning as the objective of the project. Personal beliefs about birth control, alienation from the Church, etc., clearly influence decisions. Remarkably enough, attitudes, in some cases at least, appear to be changing. But bias is one reason for integrating this project with the Primary Care Project.

There have been inevitable personality clashes. Some may be deep-rooted, but the majority are the result of misunderstandings and ill-defined administrative roles. The hesitancy of some to confront others and to use existing sanctions to enforce adherence to program directives complicates the matter.

Although these factors have strongly but subtly influenced project development, they are by no means unique to the region. Nor, in the Peruvian context, are they particularly exaggerated.

Recommendation 27

The regional director should intervene when personalities clash and affect program implementation. He should try to identify the causes of administrative and communication problems. Together, the various parties should try to resolve their problems.

Supervision

The system design carefully identifies who is responsible for supervision at each level, but the design has never been executed for at least two reasons. One, the administrative hierarchy has never been adequately established; nor have regional and area directors insisted that it be adhered to. Two, the logistics system has not been adequately planned or implemented. Furthermore, because the program is fragmented, each supervisor usually focuses on only one or two aspects of the total package of services or one or two categories of personnel at a given service delivery point. This cannot be attributed to a lack of norms. An inordinate number of norms for supervision and functions has been developed and, in fact, most should be simplified.

Some random supervision is provided, principally at the larger and more central service delivery points, where it is least needed. This kind of supervision is provided by the medical director of the centers and is supplemented by area or regional staff who periodically visit the area. But systematic supervision does not exist. Staff from certain centers sporadically visit satellite health posts, but, again, they follow no fixed schedule and have no specific purpose.

It is believed that regional and area levels are responsible for supervising all activities of the system. Personnel at these levels therefore attempt to visit the various service delivery points within their respective jurisdictions, but, given the relatively large number of points and the distances that must be traveled, the top levels alone cannot provide adequate supervision.

The various health centers, and often a number of health posts, are supposed to be directly responsible to the individual hospitals, which are to provide supervision and support. The basic role or orientation of the hospital is to provide curative services in a limited setting; thus, it is unrealistic to assume that much attention will be given to the provision of services at the health center, health post, and community levels, which receive primarily educational and preventive services. This lack of emphasis is more pronounced where there is competition for scarce resources. The hospitals inevitably win because they are powerful and centralized.

As a representative of the hospital, the hospital director must pledge his loyalty first to the hospital he serves. He is more likely to be influenced by internal pressures and pressure from medical personnel than by outside pressures from, say, the periphery. If considerable resources are not provided to the hospital and if it is not specified that these resources are to be used to support peripheral services, support probably will not be extended freely. This is the situation at at least one hospital in the region.

Where a particular hospital director refuses to follow the directives of the area or regional director to support peripheral services, and where sanctions cannot or will not be used, the structure of the supervisory system must be altered so that visits can be made. This puts a strain on other supervisory elements and generally weakens the entire system.

Transportation also influences how the supervisory system functions. In many areas, vehicles are neither well cared for nor maintained. Most health center staff need a vehicle at least part of the time to make supervisory visits. The problem of transportation and maintenance may not be insurmountable. There may in fact be a sufficient number of vehicles throughout the region, but their use must be well planned.

Transportation problems are compounded by the lack of funds for gasoline and per diem. Assuming norms exist, the budget for these items can be calculated easily. Whether the items are approved by the central government is another question. Investment in gasoline and per diem has value, for quality and productivity can be expected to increase with regular supervision.

Recommendation 28

One person in each hospital should be responsible for supervising all activities at health centers and health posts that report directly to the respective hospital. Where there are few service delivery sites, this responsibility may be included as an incremental task in the workload of an existing staff member. Where a large number of service delivery points is involved, at least one full-time person should be held responsible for the administration of the centers and posts.

Supply System

There is no integrated supply subsystem in the region. It is the responsibility of each person in the system to obtain the materials (s)he needs.

Figure 6 graphically describes the organization and flow of the supply system. In reviewing this chart, the reader should note first the lack of coordination and integration among the various sources of supplies. The direction of the flow is from service delivery point to source of supply, and not vice versa. Indeed, the attitude of the Supplies Department is that this method of distribution is probably the easiest because personnel come to the base hospitals each month to receive their checks and can pick up supplies at the same time.

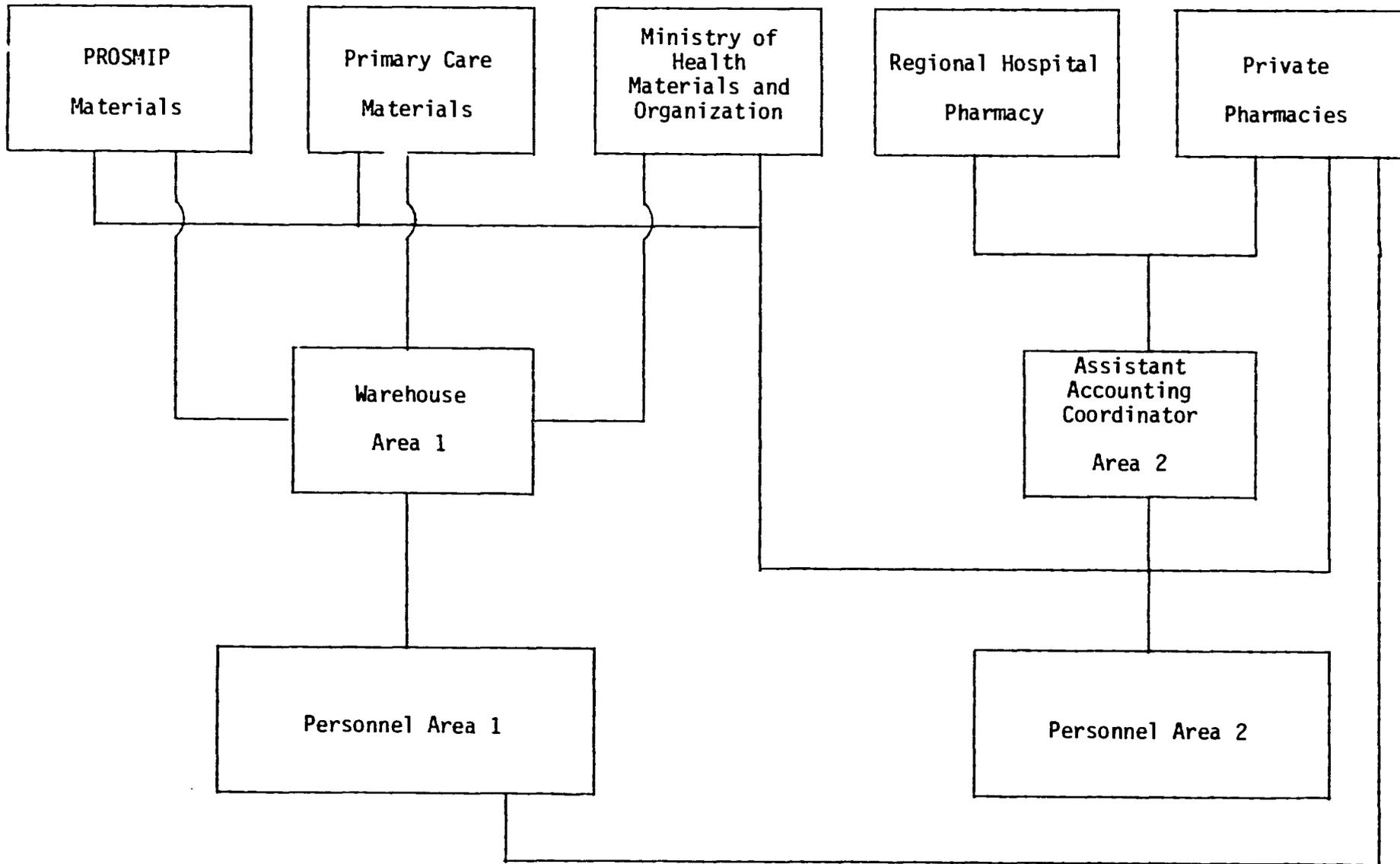
In some cases, the funds from sales of drugs at health posts and in communities are left with an informal order with the assistant PROSMIP coordinator in Area 2. This person then tries to fill the order from the hospital pharmacy, or, if the drugs are unavailable, from private pharmacies. This is a useful way to expedite drug distribution, but it deters the assistant coordinator, who has numerous other duties, and is no substitute for a functioning system. Furthermore, the coordinator must handle and be responsible for large sums of money. This practice could have unfortunate consequences, and it may also be subject to misinterpretation.

Because strikes occur from time to time, and because long distances must be traveled, isolated staff replenish their supplies with stock from local private pharmacies. This may be convenient for personnel, but it increases the cost to the system and to the campesinos, who must pay more for drugs obtained from private pharmacies.

The Primary Care Project and the MCH/POP Project occasionally donate drugs to health posts and communities. These donations are a source of capital for these health care delivery sites. Drugs are resold at a standard price (price lists are issued periodically by the Ministry of Health in Lima); often, a small percentage (5 percent) is added. When funds have been collected, supplies are replenished on a rotating basis. The amount of capital is probably diminishing with every cycle as inflation increases and the profit margin from sales decreases. Eventually, the donated capital will be reduced to an insignificant sum.

The number of drugs used at each level varies. Some promoters handle as many as 34 different drugs, although at least 30 percent of these drugs were not moved last year. This may be attributable to a lack of knowledge about the proper use of certain drugs and minimal demand. In any case, it is costly to supply the promoter with more drugs than he needs. The tax on the purchase and distribution of drugs rises as more drugs are ordered. It is costly to maintain an extra stock of drugs, particularly when the drugs expire from lack of use. The maintenance of unnecessary drugs also more rapidly reduces the capital stock of the campesinos. In addition, if drugs are available, the promoters may try to treat patients who should be referred to other levels in the system. In some isolated communities, referral may be impossible. In these exceptional cases, a larger number of drugs may be required.

Figure 6
PRESENT SUPPLY SYSTEM



If individuals are responsible for obtaining their own supplies and materials, no reordering may be done until a trip to Ica or Chincha is planned. Stocks of certain items may be depleted, however, before new materials are obtained.

Extra time is required to process each order, one by one, particularly at the end of the month, when personnel usually come to town. To streamline the process, the PROSMIP stores-manager has requested that health centers and health posts submit orders every two months. No schedule has been established.

Almost all materials destined for Area 1 pass first through the hospital warehouse in Ica. From there they are transhipped to Chincha for redistribution. In some cases, equipment is distributed from Ica, reducing control in Chincha.

Drugs and materials are passed to Chincha as requisitions. Complete orders are not always sent because there may not be sufficient stock in Ica. It is difficult to obtain materials anywhere in the region. Demand is not estimated scientifically, and materials and drugs that are ordered from the national level may not be delivered for a variety of reasons.¹ The choice is to do without or to purchase small quantities on the local market. Neither alternative is attractive. The best solution would be to organize a national acquisitions system.

Purchasing under the PROSMIP project is whimsical. Inordinate quantities of administrative supplies and other items have been stockpiled. There seems to be no logical, well conceived purchasing plan. Whatever the project leadership thinks might be useful is ordered.

This subsystem suffers from the lack of organization. The program vehicle averages two round trips a day from Chicha to Ica. Each leg takes nearly two hours. Both time and gasoline are wasted.

Regional supply points maintain separate storage areas. PROSMIP stores are managed separately, probably to ensure that few items disappear. Among the remaining stocks in the storeroom are administrative supplies, large equipment, family planning materials, and a few drugs. The danger of loss of control does not seem to be a cause for concern.

In other respects, the PROSMIP and government stores are integrated. A common accounting system was instituted at the beginning of the project. To create a fully integrated system, the purchase, storage, and distribution

¹ Examples are the lack of raw materials, delays in importation, strikes, etc.

of supplies must be combined. Each component is now separated from the others. The PROSMIP storekeeper has little administrative support as a result. The workload of the support staff of the general stores would not be increased significantly if the components were combined and the PROSMIP storekeeper were free to support the system.

In summary, there is no system to expedite the various supply functions and to ensure that field personnel have their required materials in the necessary quantities and that a maximum quantity of supplies is available at the lowest cost.

Recommendation 29

The supply officers should draft a paper that describes how, in their opinion, the supply system might function most effectively. In a manual, they should describe in detail the flow of physical supplies, funds, and paperwork throughout the system and define the roles and responsibilities of each level and each person in the system. The possibility of using health centers and health posts as intermediate supply points should be explored also. To facilitate this task, the general guidelines developed at the national level should be used. Technical assistance should be requested if it is desired.

The draft should be reviewed by the directors and other staff and revised. The system should then be tested in one or more districts and modified before it is proposed for general adoption.

Recommendation 30

The storage areas of PROSMIP should be combined with the rest of the system, and responsibility for purchasing, dispatching, and control should be transferred to the overall system. The PROSMIP storekeeper should be integrated into the system.

Recommendation 31

The administration of the rotating drug fund should be reviewed and revised. The assistant PROSMIP coordinator for Area 2 should no longer be responsible for purchasing and transferring funds. These tasks should be integrated into the supply system.

Recommendation 32

The new system should include mechanisms for estimating the demand for all articles and for rationalizing acquisitions.

Transport and Maintenance

The lack of transportation is cited frequently as an obstacle to progress. At this time there are approximately 30 vehicles in the region. There is at least one for each hospital, one or two for the regional and area offices, and five for the health centers (these are scattered). Other vehicles have been assigned to various special programs (chagas', potable water, etc.).

Fewer than 30 vehicles are functioning, however. ORDEICA seconded one, and several cannot be repaired because there are no spare parts.

To provide the supervision required, some health centers must have access to vehicles at least part of the time. Centers that supervise several satellite health posts fall into this category. Many of these centers may not need a vehicle at their disposal at all times. With adequate planning, vehicle use can be improved. Two centers are, for example, successfully sharing one vehicle.

The base hospital in Chicha is responsible for supervising 17 service delivery centers, but no vehicle has been assigned for this specific activity. Consequently, supervision is haphazard at best, and strained still more by the lack of cooperation from Pisco.

The health center in Ingenio has a vehicle, but the chauffeur lives in Ica. No effort has been made to find a local chauffeur. The vehicle remains parked.

Even where there are vehicles, area directors have restricted their use to short trips to peripheral areas. No funds have been budgeted for gasoline and per diem. Ironically, there is money in the project budget for these items.

Some routine preventive maintenance is provided, primarily in the workshop at the regional hospital in Ica. Oil is changed, bearings are greased, and the motor is washed. Staff know how to make repairs, but repair work is slow and usually delayed because spare parts are not available.

Each health region is responsible for its own vehicle maintenance. Sur Medio, for example, receives no administrative support from the Ministry of Health to procure the necessary spare parts. Nor is there a parts inventory at the national level, although vehicles are standardized to a degree. Each region must fend for itself and deal separately with the various representatives. Land Rover has only one representative in the country, and he is based in Lima. Acquiring spare parts is thus a problem.

Vehicles that need spare parts are subject to vandalism. Some are stripped of parts that are used to repair other Ministry vehicles; others are sold in the private sector.

As an experiment, the project purchased 20 mules as transport for sanitarians. The sanitarians were not enthusiastic about the idea. The experiment did not succeed. The cost to maintain the mules was extremely high in the sierra, where there is little grass, and after several mules died, the others were sold.

Lacking any means of transport, sanitarians find it difficult to supervise promoters. Some bicycles have been provided under the Primary Health Project, but in general, inadequate attention has been given to this problem.

Recommendation 33

The distribution and use of each vehicle in the health region should be analyzed to ensure more optimal use of all vehicles and the provision of transport, at least part of the time, to health centers that must provide extensive supervision.

Recommendation 34

The requirements for transporting sanitarians who supervise promoters should be analyzed health post by health post. Where the terrain permits their use, bicycles should be purchased with project funds. Sanitarians should be enabled to use public transportation if vehicles cannot be purchased.

Recommendation 35

The regional director should try to estimate and procure an adequate budget for gasoline and per diem to facilitate an active and regular system of supervision.

Recommendation 36

The Ministry of Health should establish a spare-parts inventory for Land Rovers to facilitate repairs in all regions of the country.

Training

A principal focus of activities in the Sur Medio Project is training. This component has in fact been emphasized over all other subsystems. Table 4 describes the various training efforts undertaken in this project. Staff have been trained in a variety of other projects as well. No adequate summary of these additional inputs exists.

As Table 4 shows, training has been provided primarily for professional staff. The project shares with the government the costs for training the sanitarians who work in new posts. But coordinated planning is wanting. The sanitarians frequently finish their training before equipment arrives and before other supporting systems have been established. They become frustrated while waiting for the tools they need to proceed with their assigned tasks. Fortunately, most remain at their posts until the equipment arrives. Many are now functioning at some level.

A notable omission is the absence of training for at least the first 100 promoters programmed for the first year. To date, only 12 promoters have been trained; of these, 9 are working as paid employees of cooperatives. With the goal to expand coverage, USAID and the project leadership exert considerable pressure on the project to ensure that the training proceeds as rapidly as possible. Candidates have been identified, but they are becoming frustrated as their promised training continues to be delayed.

This points to the lack of sequential planning. The initial steps in training have been completed. Nevertheless, in the absence of supporting systems, a trained promoter probably will not function adequately. If he is not paid, he will quit the program. This pattern occurs elsewhere.¹

¹ See Evaluación Final Proyecto Montero, Project 511-0453, USAID, Bolivia, Ministry of Health, July 1980.

Table 4
PROJECT TRAINING

<u>Category of Personnel</u>	<u>Course Content</u>	<u>Number of Courses</u>	<u>Length of Course</u>	<u>Number of Participants Planned</u>	<u>Number of Participants Trained</u>
Sanitarian	Normal Sanitarian Course (plus one month extra MCH/POP)	1	7 Months	100	45
Doctors	Family Planning and Program Orientation	4*	3 Weeks		
Nurses	Family Planning and Program Orientation	4*	3 Weeks		
Midwives	Family Planning and Program Orientation	4*	3 Weeks		
Ob/Gyns and Pediatric Specialists	Family Planning and Program Orientation	2	3 Weeks		
Environmental Sanitation Auxiliary	Orientation to Own Fieldwork	1	1 Month	-	15
Nurse Auxiliary		3	3 Weeks	-	117
Laboratory Auxiliary		2	7 Weeks	-	21
Statistics Auxiliary		1	3 Months	-	36
Program Leadership	Workshop for Production of Norms	1	1 Week	50	50
Promoters	Basic Training	1	2 Months	100	12

* Same courses.

Before promoters are trained, several critical elements need to be added to the system:

- The manuals for didactic training and reference must be completed.
- The system of supervision should be functioning adequately at the health post level.
- Transportation for sanitarians who must supervise promoters must be arranged.
- The equipment that promoters need must have been received.

In the absence of any one of these elements, the effort to identify candidates for training should not proceed. Such premature actions will cause frustration and resistance in the long-run.

One might ask how training outpaced the development of logistics. Again, in the absence of sequential planning for a global project, personnel gravitated toward those activities which they felt they could do. Other activities were neglected. Most members of the regional team, including two nurses and two health educators, spend a considerable amount of time organizing and participating in training courses. Unfortunately, no one is either capable or available to expedite the necessary changes in the logistics system.

The consultant was unable to evaluate the quality of training courses. He did, however, review the evaluations of two courses. The participants' response was lukewarm. (Only about 60 percent of the participants actually completed the evaluations.) Fewer persons than expected, particularly professional staff, were trained, and some left the program after they were trained for higher-paying jobs.

A number of professionals have been sent to observe programs in other countries and to participate in courses outside Peru. With few exceptions, this strategy is expensive; the application and transference of knowledge have been minimal and there has been a high turnover of staff. Staff who did not have an opportunity to go abroad have become jealous of their colleagues. In one case, a doctor was trained in a particular procedure for which he does not have the necessary equipment. According to the educational institution, he failed to learn the skill. He has not, however, been informed of this shortcoming. One may presume that he will continue to seek the necessary equipment and one day practice the procedure, perhaps at risk to his patients. This desire of educational institutions and

program leaders to spare participants embarrassment is irresponsible, could result in serious consequences for patients, and gives the program a bad name as well.

Because PROSMIP has not been integrated with the Primary Health Project, less than half of the sanitarians have received incremental training in MCH/POP. Other sanitarians are receiving family planning materials. To ensure that these persons understand and know how to use these materials properly, they should receive the same incremental training as the first group.

Another critical gap in training is the lack of programs or curricular components specifically designed to facilitate the proper use of the various support subsystems, in particular, information, supplies, and supervision. The lack of an information and supply subsystem is understandable, given the lack of any well designed system. As the system of supervision evolves, training for the various levels will become especially important. Not only the content of supervision, but also the behavioral aspects of supervision must be addressed.

Recommendation 37

Training in the technical aspects of MCH/POP should be halted, but incremental training for sanitarians who did not enroll in the earlier MCH/POP course should continue. The latter should be arranged as quickly as possible, and priority should be given to persons who now handle contraceptive materials.

Recommendation 38

Training for promoters should be postponed until other necessary program activities (prerequisites to the effective completion of community-level tasks) are completed.

Recommendation 39

Seminars on the implementation of subsystems for information and supplies should be designed and conducted before implementation. These seminars should follow the designs for the subsystems.

Recommendation 40

Quarterly or trimesterly seminars for various categories of project personnel should be scheduled to provide continuing education and to foster professional camaraderie among staff.

Recommendation 41

Future visits to observe activities should be made almost exclusively within the country, both to reduce cost and to capitalize on similar experiences in each region.

Human Resources

Clearly, the most valuable resource in the health region is the personnel. One might ask how well these people are being used. This and other questions have been addressed in other sections of this report, but several other observations can be made.

The theoretical structure of staffing is generally adequate, with the level of professional expertise decreasing from top to bottom in accordance with the activities each staff member is expected to perform. Norms have been developed. These describe in exquisite detail the functions of each category of personnel. The lists of tasks are, however, impractical; in many cases there are so many tasks that adequate attention to each would be physically impossible. Priorities are not indicated. Without supervision, staff tend to set their own priorities, and in doing so probably minimize certain critical activities.

At health centers, patients prefer to see a doctor. The workload tends to be heaviest at medical clinics as a result. Theoretically, non-clinic hours should be used to visit homes, but it is unlikely that many homes are visited because staff are neither guided nor motivated in this task.

Auxiliary staff could be used at more than one service delivery point, depending on the workload, the clinics' schedules, and the distances that must be traveled.

There is a danger in pushing for more supervision. Upper-level staff will spend too much time making field visits, and neglect other areas, such as the development of the various subsystems. After intermediate-level staff become familiar with the norms and procedures for supervision,

they can be left alone to perform those tasks, and regional and area personnel need only spot-check them on occasion. A strong information system component will also facilitate program control at all levels.

Recommendation 42

Job descriptions for each level should be reexamined and modified to more adequately reflect the reality of the work environment. Priorities should be established, and guidelines for time spent on each activity should be prepared. Representatives of the respective categories of staff and their immediate supervisors should help revise their own job descriptions. Each member of the staff should receive a copy of his job description, which should be used as a norm for supervision. This task is not critical to the success of the program and could be postponed until other activities are completed.

Recommendation 43

The staffing requirements for each delivery point should be analyzed to determine the adequacy and use of existing staff. Adjustments should be made where underutilization is evident.

The use of regional staff should be considered. When activities are not well planned, each member of the regional team seems to perform tasks assigned by the regional director; in the absence of specific assignments, they set their own priorities. It would appear that this approach would require considerable time and energy but not yield substantial concrete results. In fact, results are often not as substantial as they might be. Much time is spent replying to requests for information or organizing courses. Specific responsibilities are not always well defined. Consequently, two or more persons are sometimes involved in activities when one would suffice. These points aside, regional staff should be considered as a pool of expertise available to conduct activities in the region. Their job descriptions and areas of specialization are sufficiently vague that other tasks may be assumed.

Recommendation 44

Where possible and feasible, specific responsibility for identified program components should be delegated to various members of the regional staff. These persons should try to concentrate their work in the assigned areas.

Information System

One objective of the project was to develop an information system to improve community effectiveness and supervision and to estimate the program's impact on the community. The information system has been modified a number of times. The workload of sanitarians and promoters, who are required to report statistics, has been reduced. A satisfactory format for reporting on the PROSMIP program has been designed. Many statistics are being collected, but they have not contributed to improved knowledge of operations in the field for the following reasons:

1. The quality of information is questionable. Little effort was made to teach system personnel how to complete the required forms. Problems with definitions have resulted. Data interpretation is extremely risky.
2. The information trickles in and is often several months late, particularly if it comes from the more distant health posts. Data from as many as 35 percent of the health posts may be missing from summaries. Conclusions are necessarily skewed. This reporting deficiency can be corrected through regular supervision.
3. The system for compiling data is inadequate. Most summarized information reaches decisionmaking levels months after it has been collected. By that time, it has little value for managers. Most health posts send reports directly to area and regional offices, and not through the institution that is theoretically responsible for supervision. In this case, supervisory personnel may never see the reports.
4. Thirty-three statistical auxiliaries have been trained and are working in the region. In general, they are underutilized. Frequently, they perform tasks that are not related to statistical work.

5. Formats are not standardized. Not only is the system for primary health different and parallel, but the MCH/POP component itself uses two different formats. Consequently, it is difficult to compile and compare data.

In addition, the compilation system of the PROSMIP project operates independently of all other components, which are managed from a separate statistical office.

Given the lack of support in data compilation and the recent introduction of the system, no attempt has been made to geographically portray trends. This is a critical gap in the presentation of data. Most personnel are overwhelmed by the sheer quantity of statistics, and they are unable to readily grasp the significance of data presented in a purely tabulary format.

In the summaries of information and program indicators, global figures for each area and for the region as a whole are presented. For program management, this limited reporting may be misleading because the point of services is not indicated and erroneous conclusions may be drawn. Family planning is an example. Entry points into the system vary from area to area, requiring distinct managerial adjustments in each.

The Primary Care Division in the Ministry of Health in Lima is developing an information format which, theoretically, combines all programs into one format. The format, which is supposed to be available in about four months, will supersede existing formats. No format has been developed for the community level; it will have to be developed locally if it is not included in the national package.

In summary, there is reason to create a viable system of information, but the system now in use is of little practical value because supervision is inadequate. To function properly, the supervisory system must be organized and the hierarchy established. The information system itself should be a tool for improving the quality of the supervision. To be functional, however, a single format needs to be designed, and staff must be trained to use and interpret it. In addition, the compilation of data must be improved.

Recommendation 45

Further modification of the format should be delayed until the system which will be imposed throughout Peru has been completed. Once that system is in place, staff should be trained to use it.

Recommendation 46

Those who are responsible for supervision should be required to submit each month summaries of the activities that are conducted at the levels under direct supervision. In other words, health centers should be responsible for collecting and compiling the necessary reports from the health posts under their jurisdiction, and so forth throughout the system. Simple formats for the summary must be developed to reduce this workload to a minimum.

Recommendation 47

Statistical auxiliaries should work full-time to compile data. Their services would be better used if they served more than one health center. The workload at the upper levels would be reduced considerably, and information would become available more rapidly.

Recommendation 48

Indicators should include a breakdown, by levels; where this is neither practical nor feasible, hospital services should be separated from services at other levels.

Recommendation 49

A reporting format, including graphics, should be designed to facilitate the interpretation of data. This could be done nationally or locally.

Recommendation 50

After the new format has been introduced, the persons who designed it should hold a series of seminars for all supervisory personnel, including program directors, to show how the system is used and how data are interpreted.

Evaluation

To obtain the baseline data that were needed to determine the program's impact, an elaborate family health survey was taken in the region in early 1980. Columbia University provided technical assistance. The questionnaire was extremely complex. Though suitable for academic purposes, it was not appropriate for the project. While the data were being organized, the technical assistance team came into conflict with USAID and formally withdrew from the project. USAID/Peru did not respond favorably to subsequent requests to be reinstated. The data were passed to Informatica, the information section of the Ministry of Health, and there they have remained. Arrangements were made to process the sorted data through the National Office of Statistics in the United States, but the cards and tapes have not been retrieved.

The original idea was to carry out a survey at the end of 18 months to determine the program's impact. This, obviously, is no longer possible. However, because implementation has been slow, one could conclude that few concrete changes have occurred.

Recommendation 51

The second survey should be made at the end of the project to determine impact at that time.

Financial Management

Though not a concern of the evaluator, financial reporting should be considered. USAID's reporting requirements were not clear to project staff and the mechanisms were revised accordingly. The process is now understood, but reports have not been submitted on time. USAID received reports for three quarters simultaneously. Obviously, the accumulation of expenditures over time not only significantly delays the approval process and makes the resolution of disputes more difficult, but it also upsets the workload of both government and USAID agencies.

Various kinds of equipment were purchased with authorization from USAID, but final approval was withheld until items that conformed to specifications were delivered. One supplier, Representaciones Quir Lab S.C.R.L., sold several questionable items to the project. The equipment was inferior in quality and inflated in price. (See Appendix B.) This equipment is described below.

- Two hundred sixty stainless steel pans with lids were ordered. The same number of poorly constructed aluminum pans, without lids, were delivered. The pans were returned to the dealer, who subsequently had them dipped in a galvanizing solution and redelivered, again without lids. The price for these items was S/12,200 each (approximately U.S.\$49.00) at the exchange rate prevailing at the time. A similar item could be purchased in any market or hardware store for about \$6.00 at today's prices. The total amount involved was S/3,172,000, or approximately U.S.\$12,700.
- One hundred gynecological tables with stirrups were ordered at a price of S/68,320 each, or about U.S.\$275.00. The tables are the most simple model available to meet the specifications and are adequate. This equipment, too, appears to have been sold at an elevated price. Six of the 100 tables were never received by the warehouse in Ica.
- One hundred thirty metal stairs (two steps) were purchased for S/15,860, or about U.S.\$64.00 each. are of acceptable quality, but their price appears to have been inflated.

Recommendation 52

Financial reports should be submitted promptly to USAID at the end of each quarter.

Recommendation 53

Because of questionable purchasing practices, the sum of S/3,581,920 should be disallowed from project expenditures. Included in this figure are 260 stainless steel pans and six gynecological tables diverted while en route to the project site.

APPENDICES

Appendix A
LIST OF CONTACTS

Appendix A
LIST OF CONTACTS

Sur Medio Health Region

Dr. Humberto Tello Uribiola, Regional Director
Dr. Max Espinoza, Director, Area 1
Dr. Manuel Ferrandiz Camacho, Director, Area 2
Dr. Víctor Tord Comez, Assistant Director, Area 2
Dr. Rafael Caparón Hidalgo, PROSMIP Coordinator, Area 2
Dr. Arquiles Philpa Ramos, PROSMIP Coordinator, Area 1
Ms. Felícita Huanamtinco Cisneros, Assistant Coordinator, PROSMIP,
Area 1
Ms. Marina Yataco Aguirre, Assistant Coordinator; Assistant, Area 2
Dr. Jesús Romero García, Formerly, Regional Coordinator, PROSMIP
Ms. Bertha Legua Castillo, Regional Nurse
Ms. Soledad Jhong Aquije, Regional Nurse
Ms. Juana Espinoza Lara, Regional Nurse (Food Program)
Ms. Gladys Gallardo Luján, Regional Health Educator
Ms. Eva Jacobo Legua, Health Educator
Ms. Nélide Punlay Bendezu, Regional Statistician
Ms. Gladys de la Barca Nogales, Maternal Regional Hospital, Ica
Mr. Mario Legua Sotelo, Chief, Regional Supply System
Mr. José Moyano Conzales, PROSMIP Storekeeper
Mr. Armando Jordán Marquez, Storekeeper, San José Hospital, Chincha
Mr. José Reyes Salinas, Health Educator, Area 2
Ms. Amanda Jimenez, Nurse, Area 2

ORDEICA

Dr. Américo Mendoza Jimenez, Health Adviser (formerly, Director,
Health Region)

Ministry of Health

Dr. Luis Sobrevilla Alcázar, Director, M/I and Primary Care

Dr. Verna Alva, Primary Care

Ms. Esther Farfán, Nurse

OFASA

Mr. Humberto Sucasaire Placencia

USAID

Ms. Janet Ballantyne

Ms. Helene Kaufman

Dr. Genny Martinez

Mr. Robert Murphy

Mr. Gerald Foucher

Appendix B
EQUIPMENT RECEIPTS

REPRESENTACIONES QUIR LAB. S. C. R. L.

025

DE TODO PARA EL QUIROFANO Y LABORATORIO
MOBILIARIO MEDICO Y DE OFICINA

Av. 28 de Julio 513
Telf. 23-7409
Lima

FACTURA Nº 142

DIA 5	FECHA MES 11	AÑO 1979	Sres: Región de Salud Sur Medio Proyecto 932-0632 de la Región de Salud Sur Medio Salud Materno Infantil y Planificación Familiar. ICA.	GUIA
VENDEDOR OFICINA				ORDEN Nº 2255
FACTURADO POR M/H.			GUIA TRANSPORTE POR INTERMEDIO DE	CONDICIONES DE PAGO CONTADO

CANTIDAD	DESCRIPCION	PRECIO UNITARIO	TOTAL
50 Und.	Mesa Ginecológica Metálica acelchada con Piernas.	68,320.00	3'416,000.00
		TOTAL:	3'416,000.00

INCLUIDO IMPUESTO

SON, TRES MILLONES CUATROCIENTO DIESEISEIS 00/100 SOLES

OHG.

S. E. d O.

CANCELADO

Lima 3 de Julio 1979

REPRESENTACIONES QUIR LAB. S. C. R. L.

(Handwritten signature)

REGISTRO COMERCIAL Nº 88104
L. T. 0316094
GMP - 10320883

NO OBLIGADO AL PAGO A CUENTA O EL IMPUESTO A LA RENTA SEGUN D.S. 287 ART 14 INC 1º DEL 9.8.68 Y D.S. 015 09 HC DEL 24.1.69 ART 48º POR ATRIBUIRSE A CADA UNO DE LOS SOCIOS

LA MERCADERIA VIAJA POR CUENTA Y RIESGO DEL COMPRADOR. SIRVASE CANCELAR ESTA FACTURA CON CHEQUE A NUESTRA ORDEN.

