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FINAL REPORT

Contract No. AID/afr-C-1145

Work Order No. 2

June 28, 1976

Prepared by:

**Westinghouse Health Systems
P. O. Box 866 - American City Building
Columbia, Maryland 21044**

AID Project Title

Consultant Report

for the

**Rural Health Service Delivery Pilot Project
at Montero, Bolivia**

No. 511-439.6-3-50101

Project No. 511-11-570-439.6

I. STATEMENT OF WORK

Westinghouse Health Systems (WHS) provided technical health planning assistance to the Rural Health Service Delivery Pilot Project at Montero, Bolivia for accelerated project development. This assistance was rendered through the AID Mission to Bolivia in La Paz and the Ministry of Social Welfare and Public Health of the Government of Bolivia.

II. DESCRIPTION

At the request of the AID Mission to Bolivia, through Nancy Ruther, Project Officer, W.H.S. provided the services of a health planner: Nicholas S. Fusco, M.P.H. The work plan for Mr. Fusco was developed during the initial days in La Paz. It is attached to this report as an appendix.

III. RESULTS

After arriving in La Paz, the initial work-days were spent in briefings concerning the project, its status, and its directions, as well as developing the scope of work to govern the remaining work-days. I then proceeded to the Santa Cruz/Montero vicinity to meet the rural health out-reach team. While at Montero, I participated in four days of site visits and discussions with rural community leaders from six of the eleven communities under consideration as sites for the pilot project. While in Santa Cruz, I observed and worked with the out-reach team and Eloy Anello, of AID/Santa Cruz, Dr. Jose Serrate and Dr. Evaristo Mayda of the Public Health Department.

After about two weeks in the Santa Cruz Area, I returned to La Paz to prepare a final report and relay my observations to AID and the Ministry. On several occasions I had discussions with Nancy Ruther and Edward Kadunc of AID, and with Dr. Constantino Cuevas, Director of Planning for the Ministry of Social Welfare and Public Health. When the report was approved in draft, translation was accomplished and the final versions of both languages were prepared and submitted before my departure from La Paz.

IV. SUMMARY ITINERARY

During a period of 26 work days, provided for under an I.Q.C. agreement (AID/afr-C-1145), between the AID Mission to Bolivia in La Paz and Westinghouse Health Systems of Columbia, Maryland, the services of health planner were deployed in the following manner:

		<u>Work Days</u>
May 25; June 29	Round trip Washington, D.C. - La Paz - Washington, D.C.	2
May 26 - May 28	Briefing, La Paz	3
May 30 - Portions of June 15 & 18	Round trip by air, bus and train La Paz - Santa Cruz - La Paz	2
May 31 - June 4 June 7-11 & 14	Observations, discussions, meetings, and travel in Santa Cruz/Montero Area	11
June 21-25 & 28	Meetings, report preparation and submission, La Paz	6
May 24-30	Briefing and reporting with AID/Washington, D.C.	2
	Total Work Days	<hr/> 26

V. COMMENTARY

Summary

The Montero Rural Health Project seems to have developed well since the rural health out-reach team has been formed. The team appears to be functioning very well together. Their current work is moving with reasonable speed. Considering the short time which they have been together, the work accomplished so far is commendable.

Many of the team's activities are necessary to make foundations upon which the project can build. They have an understanding of the needs in an accelerated implementation program. The team members also seem to have strong personal commitments to rural health service delivery.

There do not appear to be any major barriers to the implementation of this project. In fact, a relatively smooth road may be predicted, probably due to extensive project development. However, the project is not without some potential problems that could cause delay. These problems of course can be anticipated and corrected before any delays occur.

Site Selection

The following communities have been selected by the rural health out-reach team as the sites for implementation of the project:

1. Antofagasta, Ichilo
2. San Ignacio, Sarah
3. Puesto Fernandez, Santiesteban
4. La Porfia/Aroma, Santiesteban

The site selection process proceeded from information developed during the site visit, interviews with rural nuclear school teachers, auxiliary nurses, and community leaders at each nuclear community. The information was recorded on a four page form, developed by the team, and used during the selection discussions.

Although each community considered had many positive qualities, the team used a reasonable selection process, and the sites selected appear to meet the prior established criteria. Any criticism would be moot. The selection process was thorough, and it appeared unbiased.

The out-reach team began with the classifications of communities recommended by consultant John Donahue (traditional camba* community, traditional mixed (camba-colla) community, organized colony community, and spontaneous colony community). The team also accepted the Donahue premise that one community be chosen from each classification.

1. Antofagasta - O.C.C.
2. San Ignacio - T.M.C.
3. Puesto Fernandez - S.S.S.
4. La Porfia/Aroma - T.C.C.

The team also discussed some of the shortcomings of these classifications, and the instability of all the criteria in the fact of actual information. For example, the spontaneous community of Puesto Fernandez was far more organized than Antofagasta, the organized colony.

* Camba and Colla are local general terms referring to people native to the Santa Cruz region and migrating from the Altiplano region, respectively.

The existing resources available in each community were examined for both positive and negative benefits to the project. The team collected information about organizational resources: mothers' clubs, parent-teacher clubs, marketing groups, and community leaders; physical resources: schools, medical posts, sanitary posts, and personnel; and program resources: sanitary program and other health programs. There was no community with an overwhelming positive set of resources; they all had some negatives. However, some communities did have resources, which although positive for the community, are negative to the project. For example, Yapacani has a functioning hospital with three physicians and staff.

The team was also concerned with the attitude of the community, as expressed by its leaders, towards the project. This is critical to the cooperation the project would get from the community. The spokes-persons from San Julian, for example, expressed low interest in the project because of their self-sufficient colony. On the other hand, the community leaders at La Porfia/Aroma demonstrated a strong awareness of public health problems and the potential interaction between their community and the project.

Another, more minor concern was registered by the team about transportation and access to each community. Although this is a problem to some degree in each site, it is severe in two cases. At Huaytu, 3 of the nine sectional schools are accessible only on foot. San Pedro is totally inaccessible by vehicle for about 5 to 6 months every year, during the rainy season.

There was also some discussion of the representativeness of these communities in terms of national replicability. While it is impossible through the selection of only four communities to adequately represent a nation, the team wanted to achieve the best representative set. This is one reason La Porfia/Aroma weighed heavily in the analysis. It represents a dispersed community, one without an identifiable center. It was the only such example among the eleven communities considered.

While concurring with the choices of the team, there is one recommendation to be made. Consideration should be given to establishing out-reach health services to San Pedro from Montero or Puesto Fernandez. With the seasonal access problems, it represents a type of community found through-out Bolivia. This is not simply a technical problem of roads or vehicles, but represents a programmatic challenge for the project. That is the project could develop out-reach health programs, deliverable during the accessible periods, and have a mechanism that would allow their continuance by the community during the isolated period.

Community Resources

The out-reach team has demonstrated strong awareness of the need to make use of existing resources. This was demonstrated during site visits and during the site selection discussions. The team seems to best understand how to employ the human and infrastructure community resources. They plan to use such resources as support mechanisms to disseminate public health information and to maintain awareness of the project. The team also recognizes that there will be difficulty applying a uniform approach over such a varied group of communities and community organizations. However, there are some constant factors among the communities: Mothers' clubs, sanitarians, schools, etc. These could be approached in a regularized fashion. For example, a one-day seminar could be given to all the existing teachers at the nuclear and sectional schools on the project, public health and recognition of childhood disease symptoms. On the other hand, the leaders in each community will undoubtedly have to be approached differently, and probably on their own terms. A model approach becomes useless in this case.

Outside of the communities, but within the health sector, the team has already begun to tap other existing resources. There have been preliminary discussions with the medical school at Cochabamba regarding the ano de provincia physicians. However, their relation with the project is not clear yet. There is also some awareness of the

various hospital based programs in Santa Cruz and Montero. This includes the rural auxiliary nurse training program in maternal and infant health taught at the Maternal Hospital in Santa Cruz and the local tuberculosis control programs.

On an intersectorial level, the team has begun to develop some public health course material for inclusion in the curriculum at the normal school for rural teachers at Portachuelo.

At each level, the team is still identifying the existing resources and their potential applicability to the program. Among the still incomplete interfaces with the existing resources, the following actions are recommended:

- At the community level, the team should attempt to develop an approach to the community organizations that will be consistent among all of project communities, thus serving as a model for repetition nationwide. Identification of a minimal acceptable level of participation in the project by community resources is necessary. Unless this is accomplished, use of these community resources loses value as a model portion of the project.

- Within the health sector, a model program could be established to train sanitary technicians in maintenance skills. In the communities there is a need for knowledge or assistance in maintaining and repairing community sanitary property and facilities, such as wells, pumps, and latrines. When these things are in disrepair, a public health hazard is created. Interface with the sanitarian training program to teach these maintenance skills is perfectly natural. This also can serve as a model program to meet a need found throughout Bolivia.

For this same need, additional support could be sought outside of the health sector, possibly from Obras Publicas, for materials and tools to accomplish the maintenance work.

Also in the health sector is the unresolved issue of the interface with the ano de provincia physicians. The following two factors are important to the use of these doctors within the project. First, a model, effort course covering local public health problems should be developed to orient these physicians to the health issues they will encounter. The course could be given to the physicians, by the team, upon their arrival in Santa Cruz. This course would serve as a model for one given in each Department of Bolivia to all ano de provincia physicians.

Second, to overcome some of the service delivery and supervisory problems with the ano de provincia doctors, a three physician team should be established at one location to serve a rural region normally covered by three doctors. This doctor team would work from either a central rural hospital or Puesto Medico, and would cover the rural areas by means of a rotating mobile doctor, who would be in the campo on any given day at a remote puesto medico. This would allow several currently unserved puestos medicos to, at least, have the service of a regularly scheduled visiting physician. This would also make those physicians more accessible for supervision. This system will probably allow the doctors to function better by providing each other with professional support and consultation, instead of isolation. In addition, these physicians can provide a more immediate referral and supervisory mechanism for the rural nurse supervisors.

Activity Planning

The rural health out-reach team appears to have a clear understanding of the need to accelerate the project implementation. To this end, they have developed an initial activity plan for June through August which reflects this accelerated pace.

However, this activity plan, as it stood on 17 June, is not an adequate final plan. It contains some conflicts among activities and some redundancies in activities

and time. Since the quarterly plan is a critical tool in the total accomplishment of this project, a formal method should be used to develop it. I recommended that a method similar to one described below be tried by the team for the current quarter, and that a "final activity plan" be submitted in about two weeks.

The quarterly activity planning process could contain the following steps:

1. Review the plan from the last quarter for incomplete tasks and task continuations.
2. Develop a listing of all tasks that need to be addressed in the current quarter.
3. These tasks should be categorized into activity or work types (teaching, administrative, field work, etc.). Within each category redundant tasks should be eliminated.
4. Then the task can be categorized by location or personnel involved in the activity. Again, redundant tasks should be eliminated within these categories.
5. The result of the three previous steps should be a final plan that reflects the total work load of the team and its individual members.
6. The plan should be formally recorded or submitted for record.
7. At mid-quarter, the activity plan should be reviewed for progress or problems, and adjusted at that time.

This process should involve no more than six to ten hours of the team's time, spread over a week near the end of each quarter.

Training Programs

Significant progress has been made on the health worker training programs in recent weeks. The team seems to value strongly the need to implement the training programs. This attitude may largely be attributed to the backgrounds in health education of the two team members, Juana Cuellar and Rosario Tellez.

The out-reach team has already coped with one problem concerning the rural auxiliary nurse supervisor training program. An absence of qualified candidates in the region has raised questions about the sensibility of proceeding with the supervisor course at this time. The team has remained flexible on this point by continuing the search for candidates while properly assessing the feasibility of postponing the course until January.

General agreement has been reached with the district rural auxiliary nurse training school at Montero about the course content for the rural auxiliary nurse training course for the project schedule to begin this month. Candidates have been, and are still being identified from the project sites, and are being enrolled in the course. This training program appears to be moving along well now, after a somewhat slow start.

No detailed discussions took place concerning the health promoter training course or the short courses (cursillos). However, from the discussions of related topics, it appears that the team has already thought about these programs. A major step has been taken toward the health promoter training course by the identification of the scope of work.

The following actions are recommended concerning the training programs:

Thought should be given to lowering the level of training for the rural auxiliary nurses, especially in the non-health fundamentals. Two purposes would be served by this action. First, the course would be better matched to the rural education levels of the candidates. Second, the problem of personnel loss due to migration to higher paying urban jobs would be lessened. (More about this under the discussion of barriers to the project.)

While the option to postpone the supervisor training course until January is not detrimental, the search should continue for candidates. Although the project sites contain few potential candidates, there are other sources. For example, the auxiliary program in maternal and child health at the maternal hospital in Santa Cruz may have some potential supervisor candidates. There also may be some existing auxiliary nurses in non-project communities who would voluntarily move to a project site because of the higher training.

However, the out-reach team should use caution in moving trained auxiliary nurses from non project communities. The voluntary aspect of such moves must be emphasized. The team must maintain a low profile in such cases. There are too many potential negatives for the project to make this method of obtaining supervisor candidates viable; unless it can be assured the non-project community would not lose its health care services.

Additional technical assistance to the project should be sought next November or December (1976) to assist in the evaluation of the first training course. If the supervisor course is postponed, such technical assistance becomes even more important to take advantage to the extra time in order to better develop and refine the supervisor training course.

Finally, the short course (cursillo) concept should be pursued to the fullest amount. The ability to give short, public health courses is a strong resource of the multi-disciplinary out-reach team. A large number of rural people, influential in their communities, could be reached by such short courses. Such courses should be developed as models for similar ones given in each department of Bolivia. The target of such short courses, in addition to those already identified, could be community leaders, food and pension keepers, club leaders, existing rural teachers, and missionaries.

- Scopes of Work

During this visit initial scopes of work were determined for the health promoters, the rural auxiliary nurses and the auxiliary nurse supervisors by the out-reach team. These were modeled from the scopes of work outlined in the Pan American Health Organization's Guide to Rural Health Planning. At this point, the team is viewing these scopes of work as preliminary and subject to modification. There are too many unknowns to properly develop fixed scopes of work now.

The following recommendations are made because of what yet remains to be done on these scopes of work:

In spite of the preliminary status of these scopes of work, they should be verbalized in order that they be recorded as a reference point from which future changes can be made.

The team should take some time in the near future to determine the salary mechanisms for the project health positions. This is especially critical for the health promoter position because of its unique and pivotal role in this system.

Technical assistance should also be sought from persons with experience relating to similar position types in other rural health delivery systems. Such assistance would be best received by the team if it is formalized and treated as any other outside consultant.

Information System

The team appears to have only begun to approach the problems of an information system for the project. The team does not appear to understand the difference between the current needs and the sophisticated evaluation information system. There is a cost

in terms of time, in using gathered information which the project cannot afford. This is unquestionably an area where focused technical assistance is needed in the near future.

Three kinds of information should be included in this system: baseline data, planning information, and evaluation data. The baseline data is needed to establish the health characteristics of project population before the health services begin. This involves data of a fundamental nature: population characteristics, morbidity and mortality rates, service coverages for example. Collection of this type of data in the rural areas would be time consuming and thus, too costly to the project. The baseline data should be a product of the available existing sources. For example, the departmental statistics of the Unidad Sanitaria could be used. These statistics or rates can be interpolated to reflect the populations in the project areas when that is estimated. Further, the baseline data does not have to be developed before the project begins; it simply represents the conditions before health services begin. Thus, baseline data can be developed, then modified as contacts with the project areas increase and as the health promoters begin their services.

In addition, some of the other groups involved in health work or other community projects in the rural Montero area will probably have already collected data which may be useful to the project as sample information.

Finally, the items for inclusion in the baseline data should have some relation to the items included in the already planned evaluation system. Although the evaluation phase is far in the future, it will be the relation to the original data that is critical.

The planning information needs overlap with the baseline data, but are oriented to specific project activities. It will most often be quantitative data, focused on a particular need, rather than statistical rates. Such information is needed to plan the

implementation of activities, the logistical support for activities, or to assist in selecting options. The need for this type of information can usually be anticipated during the development of the quarterly activities plan.

The out-reach team should take advantage of its own statistician, to lead the teams' efforts in collecting the baseline data. Because the collection activity should not dominate other work, the coordination of data and identification of existing sources places a major burden on the statistician. However, this emphasis on the statistician's technical skill is the only way the team will avoid costly time delays of data collection in the field.

Potential Barriers

Based on observations made during the two weeks in Santa Cruz and Montero, the following potential barriers to smooth implementation of the project may be anticipated. There do not appear to be any barriers so large as to jeopardize the project. However, there are some potential problems that could cause delays in the project, if they are not anticipated and acted upon.

There are three potential problems that can be identified on a large scale because they involve interaction between the project and La Paz:

There is a need to assure that persons in Montero and Santa Cruz (out-reach team members and the AID counterparts) understand the agencies and the project. This is especially true for those persons not familiar with the Bolivian Health Ministry or AID, which will be a majority of the project personnel. An initial clarification of the project relation with La Paz, and regular status updating of relationships and role will undoubtedly assist the project personnel to function better at the tasks.

There is also a need for the people in La Paz to integrate their demands on the project, for information or action, into the project schedule. Under the accelerated plan, there is little slack in the project schedule. Any demands made out of phase with project schedule will undoubtedly cause delays in the project, while the team responds to the La Paz directive.

Finally, there is a need to be concerned about the discrepancy between Dr. Mayda's planned and his actual participation in the project at this time. In these formative stages of the project, his assistance is quite important. Currently, his work outside the project seems to be drawing him away from the project. Since I understand that this has happened before and because of Dr. Mayda's potential contribution to the project, it may be necessary for La Paz to remind the other agency and Dr. Mayda of their agreement.

At the project level, there are some potential problems which could cause delays in the project.

As referred to earlier, there is a differential of two or three times between the salary for similarly trained auxiliary nurses in urban and rural areas. As the project stands, the only incentive for the rural auxiliary nurses to stay in the rural areas is their commitment to the community itself. Unfortunately, too often this is not a sufficient incentive. I believe one of two strategies may be followed:

1. Raise rural wages to levels commensurate with urban auxiliary nurse wages. However, it is recognized that this option may be difficult in light of Ministry policies and wage scales.
2. The level of education in the rural auxiliary nurse training course could be directed toward the specific needs of rural areas. The course could stress the differences between urban and rural health problems which might develop an "esprit de corps" while simultaneously making the training dissimilar with that of the urban auxiliaries. This may be the most

reasonable option to provide the necessary disincentive to urban migration. However, such changes of training direction can have large impact among rural auxiliaries because of the differences in training. Technical assistance could be made available on such changes by those who have participated in similar activities on other projects.

As with all projects of this type, interaction and supervision and interaction among the health professionals is a potential problem. The work done to date by the team on these mechanisms, through the auxiliary nurse supervisor, appear very satisfactory. However, the relationships of the health professionals above the auxiliary nurse supervisor with the project need further development and clarification. Local technical assistance could be sought to work out this problem in a way that is consistent with Health Ministry policy and would be replicable in other departments of Bolivia. Technical assistance could also be sought from someone familiar with a similar hierarchy of rural health professionals in order to advise on the consistency and viability of the system for this project.

There is a need within AID to make clearer the specific roles of its advisors on the project. These roles, of course, must fluctuate with the arrival of each advisor. However, the smooth integration of each advisor into the project can be assured in the interim and permanent roles are clarified.

Finally, there are a series of minor problems, none of which is critical, but which if compounded could cause delays.

The ordering, receipt, and redistribution of project supplies will undoubtedly have some problems, based on past experiences. Since the project personnel in Santa Cruz are not familiar in detail with such processes, any support or assistance from AID/La Paz would be very helpful.

Because of the uncoordinated and hurried manner in which supplies and equipment have been ordered so far on the project, the out-reach team or its AID advisor should cross reference all orders for omissions and develop a follow-up order or a local purchase list.

Transportation in the rural areas will be made difficult by the varied road and weather conditions. The vehicles will need a regular and good maintenance schedule. This may entail some additional cost over the current budget amount. It would also be advisable to give the users of the motorcycles a short course (a few hours) in routine maintenance, repair troubleshooting, and dirt road riding techniques.

UNITED STATES GOVERNMENT

Memorandum

TO : Nicholas Fusco, Short Term Consultant

DATE: May 28, 1976

FROM : Nancy Ruther, Project Manager

SUBJECT: Work to be done for RHDS Project

This memo serves to clarify the scope of work written in your contract between AID/W and Westinghouse to provide services for 26 days to the Project. May 25 to 29 should be spent in familiarizing yourself with the Project history & the new focus being developed in the PP. I will brief you and provide some basic materials to review, which you undoubtedly will want to supplement by talking to other people involved in the Project.

Most of your work will be carried out in Montero with the District Outreach Team and the Project Coordinator. Your actual tasks will be:

- 1) To review with Project staff the existing information on the four communities selected by the Project staff, evaluate the criteria used for the selection and recommend site changes if needed to coincide with service feasibility and cultural criteria outlined in the Donahue Report and the PP;
- 2) To review with the Project staff the existing community organization that are or could be used for health services and existing services including personnel, facilities and health outreach activities to design a rural health service delivery system;
- 3) To assist the Project staff complete the first quarterly Plan of Activities, assuring that the Plan calls for an accelerated implementation of the RHDS and training activities sufficient to meet the schedule set in the FY 1976 PP; and,
- 4) Advise the Project staff and Dr. Boostrom on the organization and timing of the training, work scopes & information system programs they will be developing in detailed fashion during the same two week period.

After two and a half weeks (May 29 through June 17) in Montero, you will return to La Paz and give a copy of the Plan of Activities to Mr. Kadunc and Mr. Landry for their review and comment. At the same time, Mr. Kadunc will schedule a review meeting with the National Coordinator, Dr. Cuevas, and you. Also during those seven remaining work days in La Paz, you will be expected to write a report which summarizes the major barriers which



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2.- Nicholas Fusco

5/28/76

you would foresee delaying Project implementation and which recommends ways to avoid the delays. This report should be submitted in final draft in English at least one work day before you leave so that I may review it and suggest changes. Within three weeks of your departure, you should submit ten copies of your final report - five in English for Mission use, and five in Spanish for MOH use.

I will be in Washington from June 8 to June 18 to defend the FY 1976 RHDS FP. In my absence, Mr. Landry will be your AID contact and Mr. Kadunc can provide you with any Project detail needed.

NR:mb

cc: ASLandry
DOOstergaard
EBoostrum
EKadunc
EAnello