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THE PHILIPPINES NATIONAL CONTROL OF ACUTE RESPIRATORY INFECTIONS PROGRAM:

RECOMMENDATIONS FOR REACH TECHNICAL ASSISTANCE 1992-1993

November 5-12, 1991

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TRIP REPORT

THE PHILIPPINES
NATIONAL CONTROL OF ACUTE RESPIRATORY INFECTIONS PROGRAM:

RECOMMENDATIONS FOR REACH TECHNICAL ASSISTANCE 1992-1993

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ACRONYMS

A.I.D.	Agency for International Development
ARI	Acute Respiratory Infections
CARI	Philippines Control of Acute Respiratory Infections
CQI	Continuous Quality Improvement
CSP	Child Survival Program
DOH	Department of Health
EPI	Expanded Program on Immunization
GOP	Government of Philippines
LOE	Level of Effort
MSH	Management Sciences for Health
MCHS	Maternal and Child Health Services
PIHES	Public Information and Health Education Services
REACH	Resources for Child Health Project
RR	Respiratory Rate
RHU	Rural Health Unit
SOW	Scope of Work
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization
WPRO	Western Pacific Regional Office, World Health Organization

1. ACKNOWLEDGEMENTS

The consultant particularly thanks Dr. Maritel Costales and her able staff for their continued warm and collegial support; Dr. Emmanuel Voulgaropoulos and Ms. Patricia Moser of USAID/Manila for their guidance and insights; and Dr. Fleming Bro of WHO/WPRO for his enthusiastic technical cooperation.

2. EXECUTIVE SUMMARY

2.1. This consultancy was a follow-on to a REACH consultancy conducted in December 1990. It was intended to review the progress of the Philippines Control of Acute Respiratory Infections (CARI) Program over the past year and to jointly develop potential scopes of work for future technical assistance from REACH to the CARI Program.

2.2. The CARI Program has made visible progress in the eleven months since the last REACH consultancy, and appears to be headed in an appropriate direction and at a sustainable pace. Limited technical staff has meant that little time has been available to devote to the issues of quality of services and the development of effective health education materials, as described in the earlier trip report, but this has as yet not had any detrimental impact on the program. However, these areas continue to be of significant importance to the long-term effectiveness of this program and are recognized by program staff as being of high priority.

2.3. Numerous areas of possible technical assistance from REACH to the CARI program were explored with officials of the Department of Health as well as with USAID/Manila. Several of these areas warrant assistance over the next 12 to 18 months. As noted in the 1990 trip report, such assistance would be likely to benefit not only the Philippines program but to serve as a valuable means of testing programmatic approaches that could be used in A.I.D.-assisted programs around the world.

2.4. A number of areas were identified as most immediately promising for further REACH involvement.

- First was the design of training assessment mechanisms and routine performance reviews to assure that program norms are in fact translated into effective and high quality services. This set of activities includes the development of rigorous training assessment, post-training follow-up, a routine health facilities survey to monitor program implementation at the field level, and, most important in the long run, the development of a continuous quality improvement approach to ARI service delivery. Depending on the findings of these various evaluation mechanisms, it is likely that assistance in the development of an ARI operations manual would be of considerable value to service providers and program managers at the regional and provincial levels.

- In addition, an immediate priority is the development of practical health education materials for midwives in order to improve maternal recognition of pneumonia and appropriate care-seeking in areas in which ARI services have been established.

- Finally, since there is currently no practical mechanism for reporting ARI program activities and services within the routine health information system, a review of this system with particular reference to ARI could be useful in modifying the routine system so that CARI program managers will not feel the need to seek parallel reporting.

2.5. Pending resolution of questions about the availability of funds that the REACH Project has requested from R&D/H for work in the Philippines, REACH will only be able to provide limited technical assistance and not all the assistance outlined in this report.

3. PURPOSE OF VISIT

The scope of work for this consultancy was as follows:

3.1. Assist the DOH with the planning of an evaluation of the CARI training program. This will include the use of the WHO health facilities survey instrument and the use of REACH consultants for the implementation.

3.2. Discuss with DOH and USAID officials a SOW for REACH technical assistance in development of health education tools for use by midwives to educate mothers in the critical area of maternal care seeking for pneumonia treatment of children.

3.3. Prepare an initial assessment of what is needed for the development of a health information system including routine ARI case reporting from hospitals and rural health units in the Philippines and how REACH can assist with the development of the system.

3.4. Make written recommendations and develop SOWs for REACH technical assistance to the Philippines CARI program before departure and discuss these with DOH and USAID officials.

4. BACKGROUND

4.1. In the course of a REACH consultancy 11 months earlier, the CARI program of the DOH was identified as a dynamic program with a high likelihood of success which is addressing a high priority problem. ARI is the leading diagnosis among children seen in health facilities nationally, and accounts for an estimated 35% of deaths among children under age 5. Simple and appropriate standards for diagnosis and treatment of childhood pneumonia have now been identified and are being promoted worldwide by A.I.D., WHO and UNICEF; these have been adopted for use in the Philippines.

4.2. The CARI program, located within the Maternal and Child Health Services (MCHS) of the DOH, was started in 1989. It is not a separate vertical program, but is carried out within the broad framework of the integrated MCHS. Well-considered and appropriate norms and policies have been adopted and the program is in the process of a rapid expansion directed at full national coverage within five years.

4.3. The CARI program is approaching expansion on a phased basis, with a principal focus on the daunting task of training the thousands of health care providers working throughout the government health services. The plan for national coverage is ambitious, but appears to be feasible if adequate levels of support and political commitment can be maintained.

4.4. USAID/Manila is supporting a wide range of activities within the DOH through the Child Survival Program (CSP). The CSP does not provide project funding, but is rather a sector assistance program which allows the Government of the Philippines (GOP) broad latitude in the use of these funds. Technical assistance is provided to the DOH through the CSP in broad areas of institutional strengthening (health planning and management, information systems, logistics and supply, health education) by a contractor, Management Sciences for Health (MSH). Because the focus of the CSP has been broad, little targeted attention has been devoted to specific disease-oriented programs such as CARI. For this reason, REACH was requested in December of 1990 to provide a preliminary review of the CARI program, and the follow-up consultancy which is the basis for this report was planned to make recommendations to USAID/Manila and REACH concerning potentially fruitful areas of technical assistance from REACH to the CARI program over the next several years.

4.5. These recommendations are addressed in the following sections of this report; however, a number of limiting factors, some of which were fully clarified only after this consultancy, warrant mention as a framework for considering these recommendations. It became clear during the course of the December 1990 consultancy that USAID/Manila was not in a position to support targeted assistance to the CARI program outside the existing framework of the CSP and its technical assistance contractor. A broad scope of work for institutional strengthening and a limited level of effort meant that MSH assistance specific to CARI program development was of necessity extremely constrained.

4.6. However, it was clear that the Philippines CARI program had potential to serve as a model for national ARI programs throughout the world, particularly for those countries with an existing health infrastructure but with continued high pneumonia mortality. Given the numerous operational issues which have not yet been resolved in implementing the new global recommendations for ARI control, the Philippines promised to provide important lessons with international implications. Therefore the earlier consultancy recommended that ongoing technical assistance to the Philippines CARI program be considered a priority for the use of A.I.D./Washington funds.

4.7. It appears at this point that budgetary constraints and a severe limitation on ARI-specific operational funding available to REACH, which to this date have not been resolved despite serious efforts in Washington, render the recommendations which follow uncertain. Nonetheless, these are detailed in the hope that new resources and some appropriate mechanism can be found to support them at some point in the near future. Because of these uncertainties, however, no schedule of technical assistance is proposed here.

5. TRIP ACTIVITIES

5.1. The consultant departed for Manila on November 3, 1991, and arrived the next day. The consultant met with Patricia Moser of USAID/Manila for a preliminary briefing on November 5 and began work with the DOH. This date coincided with a planning workshop for the 1992 CARI program which was taking place together with officials from WHO and UNICEF, and the consultant attended this workshop over the first several days in country.

5.2. During the ensuing week, all the work was carried out in Manila, as time constraints and scheduled responsibilities of CARI program staff did not make a field visit feasible. The consultant also met individually with the CARI Program Manager, Dr. Maritel Costales, and members of her staff; the Chief of the Implementation Division of the Public Information and Health Education Section of the DOH, Dr. Ma. Luz Casimiro; the WHO/WPRO ARI Medical Officer, Dr. Shimouchi, and the WPRO ARI Programme Officer, Dr. Fleming Bro; the UNICEF Health Program Officer, Dr. Willie Varona; the MSH Chief of Party, Dr. Steven Solter, and numerous others.

5.3. Preliminary findings and draft recommendations were discussed prior to departure with officials of the DOH as well as with Dr. Voulgaropoulos of USAID/Manila. The consultant departed from Manila on November 12, 1991.

6. FINDINGS/CONCLUSIONS/RECOMMENDATIONS

6.0.1. The Philippines CARI Program is well on the way to training thousands of government health care providers in standard case management. Of all the Child Survival interventions, ARI is the most sensitive to the quality of care, and the perception of quality on the part of recipients of that care (particularly mothers). As has been found by producers of other quality-sensitive products with broad consumer markets, quality is not an end point but rather a process which requires continuous attention. REACH strongly recommends that a formal continuous quality improvement (CQI) approach serve as the managerial cornerstone for the CARI Program. Although checklists and documentation of pre-determined outputs are a subset of tools in this process, they are not an endpoint in themselves since they tend to lead to managerial rigidity and do not involve the service providers in the process. Quality standards which are imposed, and in which the providers do not play a central role in reviewing and assessing, tend to be unsustainable because they are not internalized.

6.0.2. The adoption of a CQI approach is a significant undertaking, and this trip report is not an adequate forum for detailing such an approach. A number of specific steps are detailed below which can be of immediate use to the CARI Program, and which would fit into the context of CQI if this is found to be feasible and desirable on the part of the DOH.

6.1. Evaluation of the CARI training program.

6.1.1. The ultimate test of any training program is the way in which the training objectives (target knowledge and skills) are actually being carried out when trainees deliver health services. The CARI program has already defined these training objectives as the ability to accurately count respiratory rate (RR), to determine whether the RR cutoffs for defining pneumonia have been met, to identify chest indrawing, to determine whether other major danger signs are present, and to provide appropriate treatment for cases of early pneumonia and severe pneumonia. It is well recognized, however, that simply training someone in these objectives does not necessarily result in their implementation when services are being delivered. This question is key for the CARI program, and deserves substantial early attention and effort.

6.1.2. We recommend that the basis of such an evaluation be a structured process of ongoing performance appraisal. Although it is recognized that observation of actual case management is the ultimate form of appraisal, adequate performance is not possible without adequate knowledge and skills. Appraisal of knowledge and skills is logistically and managerially much easier than observation of practice. Therefore in the early steps of evaluation, primary focus should be on interview, while later evaluation steps should be based more on observation.

6.1.3. The suggested steps for such an evaluation are as follows:

6.1.3.1. At the point of training. Interview. Question to be answered: does the health worker have adequate knowledge and skills to be able to carry out ARI case management according to program norms? Pre-test and post-test of all trainees. Results of post-tests should be routinely reported and remedial action for all individuals with inadequate performance should be a formalized part of the supervisory plan. The instructor should be responsible for this appraisal and should sign all training appraisal records to allow later feedback to the instructor based on the field performance appraisal.

6.1.3.2. Follow-up to training (first supervisory contact). Interview. Question to be answered: does the health worker still retain the necessary knowledge and skills and has he/she started to use them? Target knowledge and skills should again be formally assessed, and this performance should be compared with the post-test for each trainee. Ideally this follow-up should take place within 1-2 months of training. Time since training should be noted. Analysis of this information will allow determination of how well specific knowledge and skills areas are retained, problem areas that may need greater reinforcement in training.

6.1.3.3. On an intermittent basis. Survey and questionnaire. Question to be answered: what proportion of health providers at various types of facilities are able to meet minimum program norms a considerable time following training? An important tool for such an assessment, useful primarily as a benchmark used by national program managers, is a standardized health facilities survey. This is already under development by a joint effort of the CARI Program staff and WHO, and a preliminary survey was planned for the period immediately following this consultancy. The value of this survey as a program monitoring tool should not be confused with its significant limitations as a managerial tool, but it is an important early step in the development of observational methods concerning the quality of services delivered. In addition, the early use of such a survey would be to determine the effectiveness of the training program, so that modifications could be made if necessary before the program has progressed too far.

6.1.3.4. On an ongoing basis. Interview and observation. Question to be answered: does the health worker carry out case management according to program norms? This is the area in which a CQI approach holds significant potential, since the process of assessment is most effective if it is carried out as a cooperative effort in which problems and constraints to appropriate case management are explored and resolved jointly between supervisor and service provider. In the year following initial training, supervisory interactions should be carried out on a monthly or bimonthly basis until it is clear that the health worker has adequately internalized essential program activities and is reliably able to meet minimum program norms. Again, this should not be seen as an end point, but rather a starting point from which services can be continuously improved. Supervisors will need to work with health workers to jointly define problem areas and strategies for dealing with these. The formalization of this process is the key to making it no longer a hit-and-miss proposition.

6.2. Assessment of needs for a routine health information system.

6.2.1. There is currently no straightforward mechanism for assessing the coverage and implementation of standard ARI case management. It is well recognized that another vertical information system is not likely to be either feasible or useful, and would certainly result in an unnecessary reporting burden at the periphery. A limited number of key indicators which can easily be reported as part of the routine health information system need to be defined. Information systems need to be developed which are specific for hospitals and for RHUs, since the needs and approaches of these two types of facilities differ in important ways.

6.2.2. For RHUs, a minimum information set would include periodic reporting (quarterly may well be sufficient) of the number of diagnosed pneumonia cases in children under 2 years of age (the primary at-risk group), the amount of antibiotics used for childhood pneumonia, the number of diagnosed cases which could not be treated at the health facility due to a lack of antibiotics, and the number sent to hospital for in-patient care. For hospitals, key indicators include children admitted with severe pneumonia, drugs used for treatment of these cases, and case fatality rates.

6.2.3. A short review should be carried out during the next year of how these indicators, and possibly a limited additional set, could be routinely used to assess the CARI program. For instance, an early indication of program effectiveness is likely to be an increase in the number of diagnosed cases, but this might well be accompanied by a decrease in the amount of antibiotics used on an outpatient basis as appropriate case management decreases the amount of inappropriate treatment. Similarly, it is quite possible that an effective program might initially lead to higher hospital admission rates for severe pneumonia, as cases are found which might have died in the community, followed by progressively lower admission rates over time as cases are diagnosed at an earlier stage and treated on an outpatient basis.

6.3. Operational tools

6.3.1. Operational manual

6.3.1.1. An operational manual for health workers specific to ARI has been suggested as a potentially useful tool. The EPI program has reportedly had success with such an operational manual in assuring adherence to program norms and standards. Such an ARI manual would, in principal, be usable at all levels of the health system, from managerial oversight to service delivery, and the DOH has requested REACH assistance in its development and testing. This consultant agrees that this could be a significant contribution to the national program.

6.3.1.2. However, the development of an operational manual of this type should be closely tied to the initial findings of the performance assessments discussed earlier, so that its contents can be geared closely to the objectively determined needs of workers in the health system. Subject areas which are found to be well understood and internalized would require little reinforcement in such a manual, whereas problem areas would need to be more fully developed and tested in the field.

6.3.1.3. It is this consultant's strong opinion that the last thing needed by field workers at this point is a lengthy and overly detailed manual, which would be likely to see service principally as a desk ornament; rather, the manual should be geared towards the self-perceived needs and problems of health workers, and should be designed to be user-friendly. As such, if such a manual is developed, field workers should play an important role in defining subject areas and structure at an early stage, and should be continuously involved in reviewing and field testing of drafts.

6.3.2. Health education tools for midwives.

6.3.2.1. An important element in an effective ARI program is the degree to which mothers seek care appropriately and at an early stage in their child's pneumonia. While mass communications can play an important role in this process once established case management services are widely and generally available, in the early stages of program development it would be inappropriate and counterproductive to generate demand which cannot yet be met. At this stage in the CARI program the key to health education is at the interface between the peripheral service provider, who is generally a midwife, and the mother. MCHS has identified the development of health education tools for midwives as a priority area for the next year, and this consultant fully concurs, since this will mean that raising awareness of what to do if your child has pneumonia will be tightly coordinated with the extension of case management services.

6.3.2.2. To be effective, the tool should deal with several related issues:

- How to recognize if your child has pneumonia, and what are the major danger signs.
- What to do at home if your child has ARI but not pneumonia.

- Where and when to seek help if your child has pneumonia.

- How to administer antibiotics which have been provided by the midwife at home and why to complete the full treatment course.

- Why and when to return to follow-up care.

6.3.2.3. The Public Information and Health Education Section of the DOH has considerable experience in the development of health education materials for use by peripheral workers, but no immediate plans for the development of ARI-specific materials. There is however a handbook under preparation for use by midwives, and this should be reviewed by MCHS to determine whether it would be an appropriate vehicle for ARI education as well. It is this consultant's opinion that it will probably be necessary to develop and field test a health education tool for midwives specific to ARI, rather than to expect this to be incorporated into materials currently under development. This will also allow modifications based on early experience, which might not be possible in a more comprehensive manual.

6.3.2.4. The use of a specific health education tool for ARI is particularly warranted by the finding that mothers are unlikely to remember more that two messages from any given health education session. Obviously, they will be most motivated to follow through on issues which are current and worrisome, which is reason to target the education materials at mothers who have brought their children in for care for an ARI episode, even if this is not pneumonia. Broader awareness-raising efforts concerning ARI should await effective application of such a problem-based approach.

6.3.2.5. The development of such materials could benefit from targeted assistance, particularly in translating clinical and epidemiological concepts into concrete examples with forceful mnemonic attributes. In field testing such materials, they should be judged on how usable they are by midwives in the context of their daily work demands, how appealing and memorable they are to mothers, and, ultimately, what effect they have on early and appropriate care-seeking.

6.4. Recommendations and SOWs for REACH technical assistance.

6.4.0. As noted in the Background section of this report, subsequent to this consultancy it has become apparent that the anticipated REACH resources to support the Philippines CARI program development may not in fact become available. For this reason, the previous section has been written in a somewhat broader fashion than originally anticipated, so that other mechanisms for development of these areas might be considered as well, both by USAID/Manila and the DOH. However, in the hopes that REACH will in fact be able to carry out these tasks, the following scopes of work are recommended for the next 12 to 18 month period. It is of course clearly recognized that the role of technical consultants in any of these steps will be to assist and supplement the efforts of CARI program staff, rather than carry out these activities separately, and that the needs and timing of the national program must take precedence over any theoretical model of how this should be carried out.

6.4.1. Design of training assessment and performance reviews

6.4.1.1. Training effectiveness

- Assist the CARI program in clearly identifying and quantifying the key knowledge and skills areas essential to carrying out effective pneumonia case management.

- Review and recommend modifications on existing pre-and post-tests used for trainees, based on these key areas.

- Assist in establishing mechanisms for routine review and use of this information, with reliable feedback to trainers as well as those responsible for development of training approaches.

- Estimated level of effort (LOE) for these tasks: 2-3 weeks.

6.4.1.2. Training retention

- Develop and field test first supervisory contact mechanism for assessing retention and early use of ARI knowledge and skills.

- Develop feedback mechanism so that these findings can be routinely incorporated into ongoing evaluation of training effectiveness.

- Estimated LOE: 3-4 weeks.

6.4.1.3. Health facilities survey

- Assist with refinement and initial field application of health facilities survey instrument.

- Assist with analysis and interpretation of initial survey.

- Recommend modifications to health facilities survey to maximize its utility as a management tool.

- Estimated LOE: 3-4 weeks.

6.4.1.4. Continuous quality improvement

- Develop practical model specific to Philippine setting for application of CQI methodology to delivery of ARI case management services.

- Assist with initial application of this approach in two to four selected pilot provinces.

- Estimated LOE: 4-6 weeks.

6.4.2. Development of operational manual

6.4.2.1. Needs assessment

- Review operational needs at all levels of health system and determine essential information needs.

- Review information generated from training assessment and performance reviews to determine major areas of knowledge, skill and performance deficits.

- Meet with health personnel at various levels to determine areas in which an operational manual could be useful to their job performance.

- Determine whether operational manual could play a significant role in meeting the needs which have been uncovered.

- Estimated LOE: 2-3 weeks.

6.4.2.2. Manual development (if this is determined to be appropriate in previous step)

- Outline manual components and develop prototype for field testing.
- Initial field test in one region.
- Modify manual based on feedback from fieldtest.
- Estimated LOE: 12-16 weeks.

6.4.3. Development of health education materials for midwives

6.4.3.1. Define essential messages and test means of successfully transmitting these messages to mothers in a face-to-face context.

6.4.3.2. Review existing materials used by midwives to determine whether ARI material could readily and appropriately be incorporated.

6.4.3.3. Observe current health education practices of midwives and review with selected group the practical constraints to health education in order to develop strategies to improve effectiveness of direct communication between providers and clients.

6.4.3.4. Develop prototype health education materials in coordination with MCHS and PIHES.

6.4.3.5. Field test prototypes and modify materials.

6.4.3.6. Estimated LOE: 10-14 weeks.

6.4.4. Review of health information system

6.4.4.1. Review current HIS for applicability for ARI programming.

6.4.4.2. Define minimum information set needed to manage ARI activities, and specific ways in which this information would be used at various levels in the health system.

6.4.4.3. Determine whether modifications specific to ARI can be made in existing HIS or whether alternative mechanisms would be necessary and feasible.

6.4.4.4. Estimated LOE: 2-3 weeks (note: development of the recommended HIS is not included in these tasks, as that is not likely to be feasible within the next 18 months; the tasks described here are preliminary to this step.)

7. FOLLOW-UP ACTION REQUIRED

7.1. Currently no follow up action can be planned until resources available for carrying out these recommended tasks can be identified. The top priority for REACH at this point should be a decision as to whether further technical assistance activities to the Philippine CARI program can be realistically considered, and the timing and level of such assistance.

7.2. Top priority for immediate action are the design of training assessment and performance reviews and the development of health education materials for midwives. The latter set of tasks will require identification of a health education materials development specialist who can work with REACH ARI technical staff in these activities.

APPENDIX 1

PERSONS CONTACTED

USAID/Manila

Dr. Emmanuel Voulgaropoulos, Chief, Health, Population and Nutrition
Ms. Patricia Moser, Health and Nutrition Officer

Department of Health

Maternal and Child Health Services:
- Dr. Maritel Costales, CARI Program Coordinator
- Dr. Emma Manalac, CARI Program
- Mrs. Nilda Silvera, CARI Program

Public Information and Health Education Service:
- Dr. Ma. Luz Casimiro, Chief, Implementation Division

WHO/WPRO

Dr. Flemming Bro, Regional ARI Technical Officer
Dr. Shimouchi, WHO ARI Regional Advisor

UNICEF/Philippines

Dr. Wilfredo Varona, UNICEF Project Officer

APPENDIX 2

PERFORMANCE ASSESSMENT

WHAT IS ASSESSED-> MEANS OF ASSESSMENT	KNOWLEDGE AND SKILLS	USE	ACTUAL CASE MANAGEMENT	ANTIBIOTICS AND EQUIPMENT	MATERNAL EDUCATION
TRAINING POST-TEST	X				
FOLLOW-UP	X	X			
ROUTINE MONITORING	X	X	X	X	X