Q.A. Reports

THE QUALITY ASSURANCE PROJECT'S ACTIVITY HIGHLIGHTS

APPLIED RESEARCH IN CHILD SURVIVAL SERVICES

Center for Human Services • 7200 Wisconsin Avenue • Bethesda, MD 20814-4820 • (301) 941-8550 • FAX (301) 941-8427

Improving the Quality of Care in the Control of Diarrheal Diseases in El Salvador

Authors:
Dr. Jorge Hermida
Dr. Junio Robles, INCAP/PAHO; Dr. Rafael Flores, INCAP/PAHO

Translator: Diana Santillan
Editor: Brenda Benesch, M.A.
December 1995

The Quality Assurance Project (QAP) and the Institute of Nutrition of Central America and Panama (INCAP) have worked together in a joint project to support Ministries of Health in improving the quality of care in the control of diarrheal diseases.

Project activities began with a rapid assessment of quality of care in Cholera/Acute Diarrhea conducted in 1994 in one hospital and ambulatory health services in the Department of Chalatenango. Based on the results of this rapid assessment, health personnel working at units of Chalatenango convened a two-day workshop to identify and prioritize operational problems that affect quality of care in acute diarrhea and cholera. As a result, several teams designed and implemented intervention microprojects aimed at improving specific aspects of care, such as quality of case management, client counseling, food vendor hygiene practices, and epidemiologic surveillance.

In order to demonstrate the capability to develop methods and techniques of Continuous Quality Improvement within the Programs for the Control of Diarrheal Diseases, the project had the following objectives: to collect indicators of the quality services offered by health staff, with emphasis on cholera; collaborate with health service personnel and central and regional technical teams in analyzing indicators and identifying operational problems affecting the quality of activities; provide support to those responsible for the analysis of data , decision making, and implementation of solutions for quality improvement; monitor indicators of quality service, and evaluate the impact of the interventions undertaken.

The methodology used for this study included four stages, beginning with a rapid assessment of health services, identification of problem development, implementation of solutions, and monitoring of results. During the assessment stage, data was collected, processed, and analyzed using simple techniques, such as observation and registration of service delivery, personnel interviews, and checklists. Immediately following was a workshop for Quality Improvement and Assessment in health services, during which an analysis, identification, and prioritization of problems was carried out and solution alternatives were developed. Based on these alternatives, those responsible for local services elaborated microprojects of quality improvement, which received the technical and financial support of INCAP and QAP.

Problems identified included low impact of health education in the area of acute diarrhea, deficiency in health personnel knowledge about acute diarrhea, lack of an Oral Rehydration Unit for pediatric care in one of the health centers, inappropriate hygiene standards among food handlers in towns at-risk for acute diarrhea/cholera, and insufficient epidemiological information about acute diarrhea and cholera in the rural areas of the Department.

The microprojects that were developed included solutions to address these problems. Health workers were trained in adult education methods, and appropriate educational plans were developed for each health facility. An Oral Rehydration Unit was placed in the emergency room of the of the health center which had been lacking one, and health personnel were trained in the norms for oral rehydration and in record keeping. The population received education about food handling and hygiene standards. In order to address the lack of epidemiological information, the microprojects

The Quality Assurance Project is operated by the Center for Human Services in collaboration with the Johns Hopkins School of Hygiene and Public Health and the Academy for Educational Development. The project is sponsored by the U.S. Agency for International Development under Cooperative Agreement No. DPE-5992-A-00-0050-00.

developed a manual with monitoring forms for use by health care providers, and health providers were trained in surveillance methods. Finally, the local supervision teams defined the indicators for periodic monitoring of microproject effects. This monitoring will permit the readjustment of implemented solutions in order to foster the continuous improvement of efficiency and efficacy of health service delivery.

Some key selected indicators for the monitoring of effects in microprojects are presented in the following tables. The column entitled "Baseline Assessment" presents the results for each indicator in May 1994; The column "Monitoring" reflects the situation after the implementation of microprojects, according to monitoring results from July and August 1995.

Monitoring of Indicators in Clinical Care Public Health Sector Services of Chalatenango

Indicators	Baseline	Monitoring
vaccination cards checked for children under 5	51%	70%
patients asked about the presence of blood in stool	63%	61%
state of consciousness examined	64%	70%
symptoms of thirst examined	19%	61%
oral mucous examined	58%	96%
cutaneous folds examined	39%	100%
level of dehydration noted	67%	100%
patients with or without dehydration for which ORS was prescribed	84%	100%
patients who were incorrectly prescribed antibiotics	61%	4%
patients informed about ORS	35%	100%
patients informed about danger signs of dehydration	7%	100%

The table shows positive changes with regard to clinical care, both in physical evaluation and treatment, and in health education. Specifically, one can see an increase in the evaluation of thirst symptoms, oral mucous and cutaneous folds. In addition, the incorrect use of antibiotics decreased significantly (use of antibiotics defined in agreement with national and PAHO standards).

Monitoring of the knowledge of health personnel shows an increase from 57% to 100% in the recognition of symptoms of non-serious dehydration, as well as an increase from 62% to 98% in the number of health service personnel who recognize signs of serious dehydration. The ability to perceive danger signs of dehydration and recognize the seriousness of symptoms is especially important for teaching patient home care. Also relevant is the education of the mother, or companion of the patient, with regard to the recognition of danger signs of dehydration. The percentage of health service users who were able to recognize the danger signs of dehydration increased from 37% to 100%. Finally, it is particularly important to verify that more mothers of patients know how to administer oral rehydration salts and the importance of maintaining breast-feeding during their childrens' diarrheal episodes.

However, the monitoring also permits the identification of important behaviors and knowledge which need to be reinforced, such as:

- Reviewing vaccination cards for children under five years of age;
- Asking about the presence of blood in stool;
- Examining the state of consciousness;
- Health personnel's knowledge about the calculating of liquids according to the rehydration plans;
- Recognition of the importance of maintaining regular feeding during diarrhea by the mothers of the patients.

Monitoring results show beneficial effects on the quality of services carried out within the program for Control of Diarrheal Diseases. In addition, behaviors and knowledge that need to be reinforced have been identified as a result of the activities undertaken in this continuous quality improvement effort. Altogether, nine microprojects in quality improvement, proposed by local health personnel, were implemented.

QAP and INCAP will continue to support local health providers in Chalatenango to ensure the institutionalization of quality improvement. In addition, information has been disseminated about the methods of Quality Improvement and the results achieved to date, both amongst the local personnel of health services in other areas of the country and staff responsible for decision-making at the different levels of the Ministry of Public Health and Welfare.

The Quality Assurance Project was initiated in 1990 to develop and implement sustainable approaches for monitoring and improving quality of health care in less developed countries. This project builds on 10 years of PRICOR experience. The *Q.A. Reports* series presents the methods and results of project activities in quality assurance methodology refinement and technical assistance.