

HONDURAS RXDD FIELD TEST:
FEASIBILITY OF PRESCRIBING ANALYSIS
OF DIARRHEA TREATMENTS IN
PUBLIC SECTOR HEALTH FACILITIES
AND
DRUG SALES FOR DIARRHEA TREATMENT IN
COMMERCIAL SECTOR PHARMACIES

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EXECUTIVE SUMMARY

OVERVIEW OF PRESCRIBING ANALYSIS

Diarrheal disease is among the leading causes of morbidity and mortality in many countries, especially in children under the age of five. Studies in a number of countries have shown that health providers frequently mismanage cases of diarrhea. Much of their time, and scarce pharmaceutical resources, are being wasted unnecessarily. In addition, children suffering from diarrhea are at risk of adverse health consequences.

Many countries have begun to experiment with interventions designed to improve prescribing behavior. Managers often find that their first problem is an inability to accurately describe current practices and the nature of the problem in a particular setting.

One technique that has been developed to meet this need is prescription analysis, which involves examining a sample of health encounters to see which health problems are being treated and whether the drugs used adequately address these problems. Such analyses can be useful in many contexts:

- * Description of prevailing prescribing practices;
- * Measuring trends in prescribing with repeated studies;
- * Routine monitoring of prescribing behavior;
- * Comparison of observed practices with standards.

ROLE OF RxDD

To support efforts to improve prescribing practices for diarrheal disease, PRITECH has undertaken the development of the RxDD system. When completed in July, 1991, the system will consist of four basic parts:

- * simple methods for selecting a minimum sample of locations and health facilities, and of diarrhea cases within health facilities;
- * procedures for collecting data from medical records and recording them on forms;
- * procedures for coding the information in these records and entering them into the computer;
- * simple methods for producing standard reports and

graphics on prescribing practices.

OBJECTIVES OF THIS CONSULTANCY

The primary goal of this consultancy was to field test the current version of the RxDD system in a setting in which it had never been implemented. In particular, the first objective was to test the feasibility of using the RXDD system in public sector health facilities in Honduras by:

- * examining the availability and quality of historical data on drug use for diarrheal disease, and developing simplified methods for selecting a sample of cases during a one-year period using patient logs;
- * describing local conventions for recording differential diagnosis of types of diarrhea and assembling; and computerizing a list of the drugs commonly used in diarrhea cases in Honduras;
- * observing the logistics required to collect and computerize the data needed to run RXDD;
- * measuring a few key indicators of drug treatment for diarrheal disease in the sample of facilities studied.

In addition, a second objective was to learn what would be required to adapt the system to study diarrhea dispensing practices in pharmacies by:

- * selecting a sample of pharmacies from a list of those in the Tegucigalpa area, and sending data collectors to these pharmacies with a fictitious case of diarrhea to see what was discussed and what they were sold;
- * assembling and computerizing a list of the drugs commonly sold to treat diarrhea in pharmacies;
- * measuring a few key indicators of drug sales in the sample of pharmacies studied.

STUDY OF HEALTH FACILITIES IN METROPOLITAN REGION

For logistical reasons, the study of health facilities was carried out in the Metropolitan Region located in the Tegucigalpa area. The methods of this study were as follows:

1. Description of the sample:
 - * 15 Cesamos, 11 Cesars, 1 hospital outpatient unit, 1 hospital emergency and inpatient unit;
 - * sample drawn from all cases with at least one diagnosis of diarrhea or parasites during the period May 1, 1990 through April 30, 1991;
 - * at least 2 cases of diarrhea selected each month, or more depending on the size of the facility, for a total of 1,080 cases.
2. Organization of the process:
 - * initial approval of goals of the study by the Division of Maternal and Child Health;
 - * briefing of the Director of Health of the Metropolitan Region on purposes of the study;
 - * contact directors of health facilities to explain the study, and their medical records departments to adapt the timing of the data collection to meet their needs.
3. Data collection:
 - * one physician to coordinate field work, organize the study logistics, and supervise coding;
 - * data collected in health facilities by 4 persons with formal training in pharmacy and 1 former health program administrator, supported by 2 drivers and vehicles;
 - * one day of team training, followed by 7 days of collecting data in health facilities.
4. Data sources:
 - * the sample was drawn from cases of diarrhea recorded in the daily treatment registers completed by each physician or health worker;
 - * enumerators prepared a list of cases containing medical record number, patient name, age, sex, diagnosis, and if possible, a code to identify the health worker;
 - * family medical records were retrieved by record number and searched for the treatment record of the contact by

the sample member on the date indicated.

5. Processing of data:

- * a WHO health problem classification was adapted to meet local conventions, and a drug list organized by therapeutic category was compiled from the List of Basic Medications;
- * all drugs and health problems were coded by the data collectors, supervised by the physician coordinator;
- * data were entered by experienced computer personnel, and validated by the data collection team;
- * a total of 9 person-days was required to process, validate, and correct all health facility data.

SUMMARY OF KEY FINDINGS OF THE HEALTH FACILITIES STUDY

1. Patient group

- * 1,080 Cases were selected for the sample: 491 from 15 cesamos, 286 from 11 cesares, and 303 from 2 hospitals;
- * the overall population includes anyone with a diagnosis of diarrhea or parasites; 51.7% of cases were women, and 64.0% were under age five.

2. Type of drug treatments used

- * an average of 2.6 Drugs were prescribed per case, a number which is fairly stable across all facilities;
- * overall, 43.5% of patients received one or more antibiotics, but this number varied widely across facilities;
- * about 15% of diarrhea patients in CESAMOS, 9.4% in CESARES, and 13.2% of hospital outpatients receive an injection;
- * overall, 44.9% Of cases with a diarrhea-related diagnosis receive ORS: 49.7% in CESAMOS, 41.6% in CESARES, 47.7% In hospital outpatients, and 30.2% In more seriously-ill emergency room or inpatients;
- * all levels of health facility and most individual facilities appear equally likely to use ORS to treat

diarrhea patients.

3. Identifying two diagnostic groups

* in order to better understand how diarrhea is treated, two separate groups of diagnoses were identified:

a. Acute diarrheas: cases diagnosed with diarrhea - viral, bacterial, or unspecified - or "diarrheal syndrome" with no other condition;

b. Parasitic infestations: cases treated for parasites or "parasitic syndrome", again with no other diagnosis;

* of the 1,080 cases in the overall sample, 424 (39.2%) were found to have acute diarrheas alone, while 255 had parasitic diagnoses only;

* the ages of these two groups are very different: of the acute diarrheas, 81.0% are children under 5, while of the parasite cases, only 34.9% are under 5.

4. Different treatment patterns among children

* among children under 5, both diagnosis groups receive about the same number of drugs per visit (acute diarrhea = 2.4, Parasites = 2.2);

* an average of 47.9% of children with acute diarrheas receive antibiotics, while only 12.2 % of the parasite cases do so;

* the use of antibiotics for acute diarrhea varies across facilities, with some treating 80-100% of children with antibiotics, while others treat only 0-20%;

* injection use to treat diarrhea in children in non-hospital facilities is overall quite low;

* 71.1% of children with acute diarrhea in CESAMOS and 78.8% in CESARES are treated with ORS, which is a very high rate in comparison to many other countries; only about 12% of cases of parasites are given ORS.

6. Drug use by therapeutic category among children

- * excluding hospital emergency room and inpatients, the "average" patient treated for these conditions receives:

	acute diarrheas	parasites
ORS	0.77	0.21
Antibacterials	0.42	0.16
Anthelmintics	0.15	0.74
Antiprotozoals	0.36	0.44
Vitamins, minerals	0.20	0.44
Other drugs	0.50	0.31
TOTAL DRUGS	2.4	2.3

7. Most frequently-used drugs for acute diarrhea, children vs. adults

- * focusing on acute diarrhea, ORS is the most widely used drug for children (76.7%), followed by metronidazole (35.7%) and trimethoprim-sulfa (34.5%); antidiarrheals have a low rate of use in children (0.8%);
- * for adults, the most widely-used product is metronidazole (58.3%), followed by ORS (36.7%); a third of adults receive antispasmodics (31.6%), one in five mabendazole (18.3%), and one in ten an antidiarrheal (10.0%).

8. Drug use in emergency rooms and to treat inpatients

- * among children under 5 with diarrhea seen as emergency patients or inpatients in one hospital, 62.3% received ORS while 10% were rehydrated intravenously; among adults, 5.0% received ORS while 25% received IV fluids;
- * every child and about 70% of adults seen receives an antibiotic; over half of diarrhea patients receive antibiotic injections, with the majority receiving gentamicine (26.8%); as with outpatients, trimethoprim-sulfa is the most widely-used oral antibiotic.

9. Cost of drug treatment for diarrhea

- * due to limitations in the data sources used for this study, the number of units of drugs dispensed is often missing completely (42% of all drugs), and when indicated, is of uncertain validity; cost is therefore impossible to compute accurately with this data set;
- * for example, 36.9% of medical records did not indicate

how many sachets of ORS were given, but this varies from 0% missing in many facilities to 100% missing in others;

- * overall, for cases where the data appear, 8.5% receive 1 sachet, 45.5% receive 2, 40.9% receive 3, and 5.1% 4 or more;
- * health facilities vary in dispensing habits for ORS; similar differences in pattern of dispensing for other drugs would lead to important differences in the cost and efficacy of treatment in different facilities.

LESSONS FROM THE HEALTH FACILITY STUDY

1. Feasibility of the prescription analysis process

- * all health system personnel were very cooperative and interested in the goals and findings of the study;
- * in 27 of the 28 facilities, it was possible to reconstruct continuous records of patient visits during the 12-month study period;
- * when family records for particular visits were sought, an average of only about 5-15% of files could not be found in the medical record systems;
- * within the retrieved family folders, the treatment records of 90-95% of the episodes in question were able to be identified;
- * the information on drugs prescribed and other aspects of diagnosis and treatment was consistently recorded in visit records;
- * because a separate prescription form is sent to the pharmacy to be filled, health workers often will not record the number of units to be dispensed or the concentration of the drug in the medical record;
- * to complete a study of costs of treatment, it would be necessary to link to pharmacy records.

2. Reflections on current treatment practices

- * the use of ORS is appropriately high for the treatment of acute diarrhea, consistent across facilities, and weighted toward children;

- * the use of antidiarrheals and antispasmodics is appropriately low among children, while somewhat higher among adults;
- * antibiotic use is somewhat higher than desirable (although much lower than seen in other environments), varies across facilities, and is for the most part confined to oral products.

METHODS OF THE PHARMACY STUDY

1. Selection of sites and data collection

- * from the calendar of all pharmacies in the community (Farmacias de Turno), 40 pharmacies were randomly selected;
- * 9 enumerators, differing in sex and level of apparent affluence, pose as parents of children with diarrhea and visit pharmacies to seek treatment;
- * one day of training was conducted on the purpose of the study and the fictitious case to be presented in all visits;
- * each enumerator visits about 10 pharmacies, producing information for a total of 88 completed pharmacy visits;
- * 2 visits were made to each sample pharmacy, separated by an average of two days, by persons of different sex or different apparent ability to pay;
- * all medicines recommended by the sales attendants were purchased by the data collectors.

FINDINGS OF THE PHARMACY STUDY

1. Quantities of drugs sold

- * pharmacy staff sell drugs on 82 (93%) of the visits;
- * 6 visits (7%) result in no drugs sold; 55 visits (63%) result in 1 drug; 26 visits (30%) 2 drugs; 1 visit (1%) results in 3 drugs sold;
- * average number of drugs sold for all visits was 1.3.

2. Types of drugs sold

- * altogether pharmacy staff sell 43 different products in 8 categories: ORS (6 products); antidiarrheals with kaolin (8); antidiarrheals with antibiotics (14); antidiarrheals with antiinfectives (3); other antibiotic preparations (4); anthelmenthics (2); antiamoebics (3); vitamins (3);
 - * ORS is sold on 23 (26%) visits: for ORS sales, 19 are bottled premixed solutions and 4 are packeted salts;
 - * antidiarrheals are sold on 73 (83%) visits, while products containing antibiotics are sold on 51 (58%) visits
3. Costs of drugs sold
- * for all visits, the average cost of drugs sold is 114.86: for female enumerators, the average cost is 115.29, for males, 114.28;
 - * for less-affluent appearing enumerators, the average cost is 111.32, while for more-affluent appearing enumerators, the average cost is 117.80;
 - * ORS accounts for 15% of the cost of all drugs sold, antidiarrheal products account for 75%, products containing antibiotics account for 53% of total cost.

POTENTIAL FOLLOW-UP ACTIVITIES

In discussion following the presentation of preliminary results of the field test to Ministry of Health officials, a number of ideas related to follow-up of the field test activities and possibilities for future uses of the RxDD system in Honduras were addressed. Some potential ideas include:

1. A meeting to communicate the results of this study to health facility directors;
2. Comparison studies in clinical facilities in other regions;
3. Implementation of RxDD as a monitoring tool in Metropolitan Region;
4. Study of costs of diarrhea treatment using pharmacy data sources;
5. Qualitative studies of the reasons for pharmacy behavior, and interventions to improve practice.

I. BACKGROUND AND OVERVIEW

A. PROBLEMS WITH PRESCRIBING FOR DIARRHEAL DISEASE

Diarrheal disease is among the leading causes of morbidity and mortality in many countries, especially in children under the age of five. In addition to the epidemiological significance of diarrhea-causing illnesses, visits for the treatment of diarrhea constitute a major category of service at public and private health facilities. A substantial proportion of the time of health providers, and a significant fraction of pharmaceutical expenditures, are devoted to this problem.

Studies in a number of countries have shown that health care providers frequently mismanage cases of diarrhea. Consequently much of their time, and scarce pharmaceutical resources, are being wasted unnecessarily. In addition, children suffering from diarrhea are at risk of adverse health consequences, due not only to the failure to effectively treat the dehydration that often results from diarrhea, but also to adverse reactions to many of the drugs that are commonly used to "treat" diarrhea. There are a number of common ways that diarrheal treatment has been found to be inappropriate.

1. Failure to adhere to norms of practice

Proper case management for diarrheal disease in children calls for administration of ORS or home fluids in all cases, and antibacterial or antiamoebic drugs only when their use is clearly indicated. In addition, the use of antidiarrheal drugs is discouraged, especially for children under five years.

The most serious form of mismanagement of diarrhea results from underuse of ORS. This can be due to failing to correctly prescribe oral rehydration therapy, providing inappropriate amounts of the product, or failing to explain to mothers how to use ORS safely and effectively.

In contrast to the underuse of ORS, many other drug treatments are often overused. Because of the health risks involved with using antidiarrheals and antispasmodics, their use is rarely justified. Although effective against bacterial causes of diarrhea, antibiotics are typically overused in relation to the prevalence of such causes. In addition, antibiotics are often dispensed in injectable form which carries additional health risks.

2. Unnecessarily high cost of treatment

Besides representing poor quality of medical care, the use of unnecessary products has serious financial consequences for health systems that are often severely constrained in their ability to provide services. In the case of antibiotics, even when their use is indicated, prescribing can be financially inappropriate if more expensive therapeutic alternatives are used when cheaper ones would be equally effective, for example, when injections are used instead of oral dose forms, when expensive antibiotic suspensions are given to adults, or when newer, more expensive antibiotics are used unnecessarily.

B. ROLE OF PRESCRIPTION ANALYSIS

In light of these potential problems in therapy, many countries have begun to experiment with educational or managerial interventions designed to improve prescribing behavior. Managers and administrators who want to know if such efforts are needed or to whom they should be targeted often find that their first problem is an inability to accurately describe current practices and the nature of the problem in a particular own setting.

One technique that has been developed to meet this need is prescription analysis. Simply put, prescription analysis involves examination of a sample of health encounters to see which health problems are being treated and whether the drugs that are recommended adequately address these problems. Such analyses can be useful in many contexts.

1. Description of prescribing practices

Analyses of prescriptions from a sample of health facilities or providers can be used to characterize and assess the overall patterns of drug treatment in a country or region. If they are designed for this purpose, such cross-sectional analyses can often identify substantial unexplained variations in drug use practices - among regions, among facilities or types of facility, and among individual prescribers.

These surveys of prescribing practice can be retrospective, if they rely on the historical records of prescribing that might exist in a health system, or prospective if the treatment records for current cases of diarrhea are collected over time.

2. Measuring trends with repeated studies

Repeating a well-designed prescription analysis survey after

a certain interval of time can be one way to measure changes in either morbidity profile - for example, the relative prevalence of diarrheal cases due to different etiologies - or more importantly, in pharmaceutical treatment practices. If an intentional effort was made to improve prescribing in the interval between these surveys, they can serve as a way to measure the impact of these interventions.

3. Routine monitoring of prescribing behavior

The use of prescription analysis as a routine monitoring tool offers a useful variation on the idea of repeated surveys. A monitoring application would be characterized by the regular collection of a minimum set of prescriptions for a limited number of health problems from a specific group of facilities and prescribers, perhaps on a regional basis. The process of collecting and analyzing these data would be integrated into existing reporting and supervisory systems. The reports resulting from such a system could serve as a means for targeting specific problems in drug treatment, and supervisory visits or educational interventions could be tailored to those most in need.

4. Comparison of observed practices with standards

In addition to providing information about quality of drug treatment, prescription analysis provides a means to contrast actual drug use patterns with theoretical requirements. In this way, it is possible to address issues like how much is being spent on treating specific conditions versus how much would be spent if all prescribers followed standards, or how much the consumption of particular products would change. The use of prescription analysis for this purpose requires that explicit population-based standards of treatment be defined for the health problems in question.

C. ROLE OF RxDD

To support efforts to improve prescribing practices for diarrheal disease, PRITECH has undertaken the development of the RxDD system. The development of this system has been carried out primarily in Indonesia in collaboration with the CDD Programme of the Indonesia Ministry of Health, where an earlier version of the system was tested and installed for use as a management tool. The current version of RxDD expands greatly on the flexibility of that system, and on its adaptability to new country environments.

When completed in July, 1991, the system will consist of four basic parts:

1. Strategies for sampling

In order to help people undertaking prescription analysis gain the benefit of the most amount of information for the least cost, the RxDD system will describe a number of concrete alternative strategies for drawing a sample of:

- a. Locations, or health facilities, including guidance on how to determine the optimum number to include in a sample in order to obtain a desired degree of precision in estimates, and recommendations for selecting facilities to obtain reliable contrasts on key indicators;
- b. Cases, or prescribing contacts, including simple methods for selecting cases under a variety of record-keeping circumstances, the minimum numbers needed to estimate key parameters of interest, and methods for spreading the sample of cases over the entire time period under study. Alternatives for both retrospective and prospective sampling of cases will be included.

2. Data collection

The system will describe procedures for collecting data from medical records or pharmacy records, and for recording them on standardized forms. Procedures for training data collectors to do this task reliably and for supervising the data collection process will also be included.

3. Conventions for coding and data entry

Because of the complex nature of medical information and of pharmaceutical products, there are many possibilities for errors to be introduced into a systematic data collection process. The RxDD system will also include descriptions and suggested solutions of many of the common problems in recording data on drug prescribing, and procedures for validating data before and after they have been entered on a computer.

4. Computerized data analysis and reporting

Finally, the RxDD system will contain pre-programmed procedures for producing standard reports and graphics on key elements of prescribing for diarrheal disease, and will also contain more flexible routines for defining tables to contrast practices among locations, categories of patients, or types of health provider.

D. SCOPE OF WORK OF THIS CONSULTANCY

As a part of the process of development of the current version of RxDD, PRITECH felt that it was important to introduce the system in a completely new environment where the adaptability of many of the planned procedures could be tested in a field setting. In addition, this field test could provide an opportunity to introduce the system to Ministry of Health decision-makers to elicit their input on ways it might be usefully applied in their own national setting. The Ministry of Health of Honduras expressed interest in the goals of such a consultancy, and a scope of work was developed (Annex A) which included the following objectives:

1. Provide for appropriate and detailed briefing for MOH and USAID staff on the utility of prescription analysis for supporting CDD and other health care activities;
2. Carry out a prescription analysis for a sample of health facilities, including collection of data on site, data entry, and production of illustrative tables and graphic reports;
3. Carry out an analysis of drugs sold for diarrhea at retail pharmacies to test procedures for prospective data collection and adaptability to private sector pharmaceuticals;
4. Make a formal presentation of findings for MOH and USAID staff, and seek input on whether and how such a system might be used in Honduras;
5. Prepare a report documenting the work carried out and making recommendations for follow-up activities.

The following sections describe the methods and key findings of the two studies which were completed under this scope of work, and discuss potential applications of prescription analysis and related activities that were raised in meetings with MOH officials. A synopsis of the objectives, inputs, and outputs of the RxDD field test is included in Annex B.

II. STUDY OF CLINICAL FACILITIES IN THE METROPOLITAN REGION

A. RATIONALE FOR THE STUDY

The applicability of the proposed RxDD methodologies for data collection and prescription analysis to the situation in public sector facilities in Honduras was the principal question to be addressed in this consultancy. The specific objectives of carrying out such a study were to see if it was possible to:

- * gain necessary administrative and political support to conduct a prescribing analysis in a single region;
- * identify the sources of data needed to draw a sample of cases and specify diagnosis and treatment;
- * train enumerators to reliably collect the data on prescribing episodes;
- * translate the RxDD software to Spanish, and have local personnel input and verify the data;
- * produce illustrative tables and graphics to demonstrate the types of prescribing analysis possible with the system;
- * following presentation of results, gain input from MOH officials on ways such a system might be installed and used in Honduras.

B. METHODOLOGY

The methods that were used to carry out the prescribing analysis in health facilities are detailed below. Many of these methods represent modifications on basic ideas in RxDD that were developed during the course of this work.

During initial contacts with the MOH, it was planned to collect data for this study in two different regions, but due to logistical reasons, it was decided to limit the focus of the study to all facilities in the Metropolitan Region.

1. Description of the sample

Included in the sample were all the public health facilities in the Metropolitan Region: 15 CESAMO, 11 CESARS, 1 Hospital outpatient unit, and 1 Hospital emergency and inpatient unit. A list of these facilities is included in Annex C, and they are located on a map of the region in Annex D.

The universe from which the sample was drawn included all cases with a diagnosis of diarrhea or parasites during the period May 1, 1990 through April 30, 1991. For each facility, 2 cases in which either diagnosis was present were selected from each month to be included in the sample, with more per month chosen in larger facilities depending on the size of the facility.

A total of 1,080 cases were collected in all facilities.

2. Preparation Phase

The first step in carrying out the prescribing analysis was a briefing for the Division of Maternal and Child Health, MOH, and their initial approval of the goals of the study.

Next, a briefing was held with the Director of the Metropolitan Region to inform him about the purpose of the study, and to ask for permission to examine medical records in all regional health facilities. Subsequent meetings were conducted with the Directors of each health facility to explain the study and to assure them that the results would be confidential.

Directors of statistics and medical records departments within each facility were contacted to explain the study, and to adapt the timing of the data collection to meet their needs.

3. Data collection

One physician was responsible for coordination of the field work, organization of the study logistics, and supervising of data coding.

A team of 4 persons with formal training in pharmacy and one former health program administrator were hired to collect the data. These individuals were supported in this work by 2 drivers and vehicles. As much as possible, the process was structured to encourage team effort, including cooperation by the staff of the health facilities.

A one-day training session was conducted with all personnel involved in the study. An outline of the issues covered in the training, and the time allotted to each is included in Annex E. Following the training, all enumerators worked together for two days in a single large CESAMO and one of the sample hospitals in order to learn together the methods for identifying and selecting cases to be included in the sample under different circumstances, and to work out details of the recording and coding of data.

Following these joint efforts, team members generally worked alone or in pairs to gather the data in individual facilities. Including the days of joint work, the collection of data in the 28 health facilities lasted 7 work days.

4. Data sources

The sample was drawn from cases of diarrhea recorded in the

daily treatment registers completed by each physician or health worker. These logs are collected and bound each month by the person responsible for statistics at each facility, and they are used to compile the monthly statistics that are reported to the Regional office.

Initially, it was planned to draw the sample from the patient registration logs at each facility, which provide a more uniform chronological record of all visits, but it was found that these logs did not contain, as expected, a record of the health problem for which the patient was visiting the facility. Since treatment logs are not necessarily bound chronologically within the month, it became necessary to alter the method for spreading cases temporally. Enumerators were instructed to draw a case at the beginning and halfway through the bound treatment logs, if two cases were to be selected, and at appropriate intervals if more were to be chosen.

From the treatment logs, a list of cases was compiled which contained medical record number, patient name, age and sex, diagnosis, and if possible, a code to identify the prescribing health worker. For each sample case chosen, the next case of diarrhea or parasites in the treatment log was also selected as an alternate in case the sample case record could not be found. Family medical records were retrieved by record number and searched for the treatment recorded for each sample member (or alternate) on the date indicated.

In a few centers, if the records were not available to follow the specified sampling procedures exactly, these procedures were modified by the enumerators in order to draw a sample of cases covering as much of the study period as possible. Enumerators proved to be very flexible in appropriately adapting the procedures when this proved necessary, while consistently maintaining the intent of the data collection process.

5. Processing of data

A basic health problems classification used by the WHO was adapted to meet the local conventions for describing diarrhea. The list was translated and incorporated into the system (Annex F).

A drug list organized by therapeutic category was compiled from the List of Basic Medications, adapted to the required structures of the program, then computerized. Additional drugs were added to the master file as they were found during the data collection process (Annex G).

The adaptation of the drug list proved to be among the most difficult tasks in implementing the system. The organization of the list of basic medications is not strictly hierarchical, and some of the codes used to identify drugs on this list are not specific to a single concentration and package size as required by the program in order to be able to calculate costs accurately.

In addition, it was found that many of the drug prescriptions recorded in the medical records refer to a drug in general terms, such as "ASA" for acetosalicylic acid, instead of a particular concentration or dose form, such as "ASA 100 tabs". The data coding procedures needed to be adapted to accept information in this form, and still allow reports to group products into appropriate categories. The experience suggested a basic modification in the data structures expected by the system.

The reference lists were used by enumerators to codify data on the data collection form (Annex H).

Data processing was handled by experienced computer personnel associated with the MSH field project. They first translated the program into Spanish using the translation utility integrated into the software (see examples of screens in Annex I). Coded data from the data collection forms were then entered, printed for validation, validated by the data collection team, and errors were corrected accordingly. The level of effort required to translate the program, process, validate, and correct all health facility data was 9 person-days.

C. ILLUSTRATIVE FINDINGS FROM THE HEALTH FACILITY STUDY

In order to demonstrate the types of analysis possible with the RxDD system, examples of the two basic reports structures were generated from the prescribing encounters database. These report structures contrast locations (facilities) on key prescribing parameters (Annex J), and compare the use of drugs by generic category among subgroups of cases (Annex K). Each of these report types is prepared for different subsets of cases based on location and/or diagnosis.

From the reports, examples were prepared of graphics that can be generated in a standard way by RxDD and printed using Harvard Graphics; these examples are incorporated in the discussion below.

The goal of the field test was not to produce an exhaustive analysis of the prescribing data set. When the final version of

the software is supplied to the MOH, further reports and graphic analyses will be possible. Until then, the database files can be accessed using standard dBase compatible software.

A discussion of the basic findings of the health facilities study follows.

1. Patient group

A total of 1,080 cases were selected for the sample: 491 from 15 CESAMOS, 286 from 11 CESARS, and 303 from 2 Hospitals.

The sampling criteria were to include anyone with a diagnosis of diarrhea, parasites, or a specific diarrhea etiology (for example, amebiasis or giardiasis) whether or not they were treated for another health problem (Annexes J-1, K-1).

51.7% of cases were women, and 64.0% were under age five (69.1% in CESAMOS, and 51.7% in CESARES).

2. Type of drug treatments used in entire sample

An average of 2.6 drugs per case were prescribed, a number which is fairly stable across all the facilities.

Overall, 43.5% of patients with the target conditions received one or more antibiotics, but this number varied widely across facilities, with a low of 12.5% and a high of 90.3% in two CESARS.

Approximately 15% of diarrhea patients in CESAMOS, 9.4% in CESARES, and 13.2% of hospital outpatients (Hospital A) receive an injection.

3. ORS use in the entire sample

Overall, 44.9% of cases with a diarrhea-related diagnosis received ORS: 49.7% in CESAMOS, 41.6% in CESARES, 47.7% in Hospital outpatients units, and 30.2% among the more seriously ill emergency room patients or inpatients (Hospital B).

Use of ORS to treat diarrhea patients appeared equally likely at all levels of health facility and within facilities at each level.

4. Stratification by diagnosis groups

In order to better understand how diarrhea is treated, two separate groups of diagnoses were identified from the sample:

- * acute diarrheas: cases diagnosed with diarrhea - viral, bacterial, or unspecified - or "diarrheal syndrome" who were not indicated as having any other condition except for dehydration or malnutrition (Annexes J-2, K-2, K-4).
- * parasitic infestations: cases treated for parasites or "parasitic syndrome", either generally or where specific helminths or protozoa were mentioned, and again with no other diagnosis (Annexes J-3, K-3).

From 1,080 cases in the overall sample, 424 (39.2%) were found to have acute diarrhea alone, while 255 had parasitic diagnoses only.

The ages of these two groups were very different: the proportion of children under five was 81.0% in the acute diarrhea groups and only 34.9% in the parasites group.

5. Different treatment patterns among children by diagnosis

Among children under 5, both diagnosis groups received about the same number of drugs per visit (acute diarrhea = 2.4, parasites = 2.3).

An average of 47.9% of children with acute diarrhea received antibiotics, while only 12.2 % of the parasite cases did so.

The use of antibiotics for acute diarrhea varied across facilities, with some facilities treating 80-100% of children with antibiotics, while others treat only 0-20% (see Figure 1).

The use of injections to treat diarrhea in children attended in non-hospital facilities is overall quite low.

Overall, 71.1% of children with acute diarrhea in CESAMOS and 78.8% in CESARES are treated with ORS, which is a very high rate in comparison to many other countries; only about 12% of cases of parasites in children are given ORS.

6. Drug use among children by therapeutic category

Children treated either for diarrhea or parasites received more than two drugs per visit. Examining differences in the drugs used to treat these conditions by therapeutic class provides an indication of whether the classes represent useful "diagnostic groupings" by prescribers, or whether the terms are actually used interchangeably in the medical records.

Excluding hospital emergency room patients and inpatients, the classes of drugs which the "average" child treated for either diarrhea alone, or for parasites alone, receives are presented in Table 1. (See also Figure 2, which presents these data in graphic format.) Note that the data are expressed as average drugs per case, since it is possible for children to have received more than one drug in a given class; in most instances, however, these figures can be directly converted to percentages.

TABLE 1: DRUGS BY THERAPEUTIC CLASS USED TO TREAT DIARRHEA ALONE OR PARASITES ALONE IN CHILDREN UNDER 5 IN OUTPATIENT SETTINGS

DRUG CLASS	ACUTE DIARRHEA	PARASITES
ORS	0.77	0.21
Antibacterials	0.47	0.17
Anthelmintics	0.15	0.74
Antiprotozoals	0.36	0.44
Vitamins, minerals	0.20	0.44
Other drugs	0.45	0.30
TOTAL DRUGS PER VISIT	2.4	2.3

7. Most frequently-used drugs for acute diarrhea

Within these therapeutic categories, what are the most frequently-used products, and are different products used for children and adults?

Focusing on acute diarrhea (see Figure 3), ORS is by far the most widely used drug for children (76.7%), followed by Metronidazole (35.7%) and Trimethoprim-sulfamethoxazole (34.5%); antidiarrheals (0.8%) and antispasmodics (7.8%) have a low rate of use in children (0.8%).

For adults, the most widely-used product was Metronidazole (58.3%), followed by ORS (36.7%); nearly a third of adults received antispasmodics (31.6%), one in five received Mebendazole (18.3%), and one in ten was prescribed an antidiarrheal product (10.0%)

8. Drug use in emergency rooms and to treat inpatients

Cases seen in the Hospital Rehydration Unit, Observation ward, or as inpatients have more complicated conditions, and would be expected to have different drug use patterns (Annex K-4).

Among children under 5 with any diagnosis of diarrhea seen in one Hospital, 62.3% received ORS while 10% were rehydrated intravenously; among adult cases, 5.0% received ORS while about 25% received IV fluids.

Antibiotics are of particular interest because of cost and the potential for the development of resistance; nearly every child and about 70% of adults seen received an antibiotic.

Over half of diarrhea patients received antibiotic injections (see Figure 4), with the majority receiving Gentamicin (26.8%); as was found for outpatients, Trimethoprim-sulfamethoxazole was the most widely-used oral antibiotic.

9. Cost of drug treatment for diarrhea

Due to limitations in the data sources used for this study (discussed below), the number of units of drugs dispensed was often missing completely from the medical records (41% of all drugs), and even when indicated, was of uncertain validity. For this reason, it is impossible to accurately estimate the true cost of drug treatment for diarrhea in regional health facilities.

Data for ORS give a useful illustration of the overall quality of the data on quantity dispensed (see Annex J-4); 36.9% of medical records did not indicate how many sachets of ORS were given, but this figure varies from 0% missing in many facilities to 100% missing in others.

For cases where the data are available, 8.5% received 1 sachet, 45.5% received 2 , 40.9% received 3 , and 5.1% received 4 or more sachets.

Health facilities seem to vary in their dispensing habits for ORS, some providing more sachets on average and some providing fewer; if there are similar differences in pattern of dispensing for other drugs, this might lead to important differences in the cost and efficacy of treatment among different facilities.

D. LESSONS OF THE HEALTH FACILITY STUDY

The principal lesson of the study of health facilities was that it

is possible to use the RxDD methodology and analysis system to carry out a one-year retrospective study of prescribing practices in public health facilities in the Metropolitan Region of Honduras. Particular aspects of the process of conducting this study that are of note include:

1. Feasibility of the process

- a. all health system personnel were very cooperative and expressed much interest in the goals and findings of the study;
- b. in 27 out of the 28 facilities, it was possible to reconstruct continuous records of patient visits during the 12-month study period;
- c. when family records for particular visits were sought, only 5-15% of the files could not be found in the medical record system of the facilities sampled;
- d. within the retrieved family folders, the treatment records for 90-95% of the sample episodes could be identified;
- e. information on prescribed drugs and other aspects of diagnosis and treatment was consistently recorded in visit records, with only a small number of illegible drug names;
- f. clear indications of the concentration, product package size (where relevant), and number of units prescribed were often missing from the records, presumably because a separate prescription form is sent to the pharmacy to be filled which contains this information;
- g. to complete a study of costs of drug treatment, it would be necessary to link the visit records to pharmacy records, and such linkage seems possible if done prospectively.

2. Reflections on current treatment practices

The conclusions about prescribing practices that can be drawn from a sample of this size seem quite reliable at a regional level, and also among groups of health facilities (for example, all CESAMOS or all CESARES).

However, given the sampling method used, almost equal weight was given to cases of diarrhea and parasites. As a result, the number

of single-diagnosis cases of either condition is relatively small at the facility level (usually between 6-15), which can lead to unstable estimates. For this reason, care should be taken in drawing any conclusions about the practices in single facilities for either of these two conditions considered separately.

Some general reflections on treatment practices are:

- a. the use of ORS is appropriately high for the treatment of acute diarrhea, apparently consistent across facilities, and weighted toward children;
- b. the use of antidiarrheals and antispasmodics is appropriately low among children, while somewhat higher among adults;
- c. antibiotic use is somewhat higher than desirable (although much lower than seen in other environments), seems to vary across facilities, and is for the most part confined to oral products;
- d. the use of injections to treat diarrhea is overall quite low, particularly in the CESARES.

III. PROSPECTIVE DATA COLLECTED IN COMMERCIAL PHARMACIES

A. THE RATIONALE FOR THE PHARMACY STUDY

In many countries, pharmacies are primary locations for the treatment of diarrheal disease. Diarrhea is a health problem that must be faced on a frequent basis, especially by parents of young children. Pharmaceuticals have come to be seen as the most appropriate solution to correct this problem.

Pharmacies are often used as the location to treat diarrhea because they are convenient, can offer quick service where waiting in long queues is not necessary, and can provide a reliable supply of drugs. Some countries have begun to explore ways to improve the diarrhea treatment practices of drug sellers, and in particular, to see if there are methods to encourage pharmacies to sell ORS to customers with diarrhea, and to offer these customers reliable advice about the need for medical advice and prevention.

A study of sales practices in private pharmacies was included as part of the field test of RxDD for two reasons:

1. The technique of using simulated purchase visits to pharmacies to seek diarrhea treatment has been used successfully in a number of settings. Such a study offered the possibility to

test the adaptability of RxDD to be able to handle prospective information collected from the private sector, where much of the sales were expected to be proprietary products not included on the list of basic medicines.

2. It would be possible in this way to compare the types of drugs that would typically be offered for sale in the private sector with those that were observed to be in common use in health facilities.

B. METHODS OF THE COMMERCIAL PHARMACY STUDY

The methods used in the study of private sector commercial pharmacies were as follows:

1. Selection of sites

From the calendar of all 155 pharmacies in the Tegucigalpa-Comayaguella area (the Farmacias de Turno, Annex L), 50 pharmacies were randomly selected. These pharmacies were located on maps to assist enumerators in finding them (Annex D).

2. Data collectors and visits

Enumerators were hired to pose as parents of a two year-old children with a simple, uncomplicated case of diarrhea who would visit the pharmacies in the sample to seek treatment. A standard scenario that the enumerators were to follow was prepared, which detailed the responses they were to give to common questions that might be asked by sales attendants (Annex M).

Enumerators were selected from both sexes, and in addition, they were chosen to represent persons who would appear more affluent when entering a pharmacy, and persons who would appear less affluent. In this way, it would be possible to see if sales practices would vary according to the sex of the customer or apparent ability to pay for medicines.

A summary of the distribution of enumerators and visits according to these characteristics is presented in Table 2.

TABLE 2: SUMMARY OF THE DISTRIBUTION OF ENUMERATORS AND VISITS IN THE PHARMACY STUDY BY SEX AND LEVEL OF AFFLUENCE

	FEMALE	MALE	TOTAL
APPEAR LESS AFFLUENT	Number = 2 Visits = 20	Number = 2 Visits = 20	Number = 4 Visits = 40
APPEAR MORE AFFLUENT	Number = 3 Visits = 30	Number = 2 Visits = 20	Number = 5 Visits = 50
TOTAL	Number = 5 Visits = 50	Number = 4 Visits = 40	Number = 9 Visits = 90

One day of training with all enumerators was conducted on the purposes of the study, the details of the fictitious case to be presented in all visits, and the techniques for filling out the data collection instrument (Annex N). Following this training, each enumerator visited a pharmacy not in the sample to conduct a pilot visit, and to practice filling in the data collection form.

During a one week period, 2 visits were made to each sample pharmacy. The enumerators assigned to each pharmacy were either persons of different sex, or persons of the same sex but with different apparent ability to pay. The visits to each pharmacy were separated by an average of two days.

All medicines recommended by the sales attendants were purchased by the data collectors. If they were asked how much they were willing to pay for medicines, enumerators were instructed to replay with an amount that varied by apparent ability to pay, but even the amount mentioned by the relatively less-affluent enumerators was far in excess of the average price of the medicines sold in the study. The issue of willingness to pay was discussed in only 8 of the 88 completed pharmacy visits.

C. ILLUSTRATIVE FINDINGS ON CURRENT SALES PRACTICES

As with the health facility retrospective study, the principal purposes for conducting the pharmacy study were to test aspects of the RxDD methodology. However, a presentation of illustrative findings from the study follows.

1. Quantities of drugs sold

The average number of drugs sold during a visit to a commercial pharmacy was 1.3. The distribution of number of drugs sold during these visits is presented in Table 3. (The same data are presented in graphic form in Figure 5.)

TABLE 3: DISTRIBUTION OF NUMBER OF DRUGS SOLD DURING PHARMACY VISITS

NUMBER OF DRUGS SOLD	NUMBER OF VISITS	PERCENT OF VISITS
0	6	7%
1	55	63%
2	26	30%
3	1	1%
TOTAL	88	100%

It is of note that in 6 visits, no drugs were sold. Some of the reasons for this described by enumerators include:

- * "Bring urgently the child to a physician. He could die from dehydration. You must know the cause."
- * "We don't have drugs for children."
- * "A child with 2 days of diarrhea could have dehydration. It is better to visit a physician."

Other comments of note taken from the data collection forms are included in Annex O.

2. Types of drugs sold

A total of 48 different pharmaceutical preparations were sold by the 50 pharmacies visited. A list of the trade name and principal ingredients of all the products is included in Annex P. A summary of the different types of preparation sold, and the percent of visits during which each type of product was sold, is presented in Table 4. (These data are also presented in Figure 6, with grouping of antibiotics containing antidiarrheals into both the "antibiotic" and the "antidiarrheal" categories.)

TABLE 4: NUMBER OF DIFFERENT TRADE NAME PRODUCTS SOLD BY TYPE, AND PERCENT OF VISITS ON WHICH PRODUCTS OF THESE TYPES WERE SOLD

	NUMBER OF PRODUCTS	PERCENT OF VISITS SOLD
ORS	6	26%
ANTIDIARRHEALS WITH KAOLIN	8	18%
ANTIDIARRHEALS WITH ANTIBIOTICS	14	51%
ANTIDIARRHEALS WITH OTHER ANTIINFECTIVES	3	14%
TRIMETHOPRIM-SULFA COMBINATION ANTIBIOTICS	4	6%
ANTIHELMINTHICS	2	2%
ANTIAMOEBCIS	3	5%
VITAMIN PREPARATIONS	3	3%
TOTAL OF ALL PREPARATIONS	43	--

ORS, the basis for appropriate treatment of diarrheal disease, was sold during 23 (26%) of the visits. This percentage is substantially higher than has been reported in similar studies in other environments. Of these ORS products, 19 were bottled premixed solutions and 4 were packeted salts. It is worth noting that bottled forms of ORS are many times more expensive than packeted preparations to which water is added.

Antidiarrheal products were sold on 73 (83%) of the pharmacy visits. Some of these antidiarrheals were kaolin-pectin mixtures containing antibiotics, principally neomycin and streptomycin, while others contained kaolin and pectin alone or were mixtures of a variety of other ingredients.

Products containing antibiotics alone, or antibiotics mixed with antidiarrheal products, were sold on 50 (57%) of the visits.

3. Costs of drugs sold

The average drug cost per visit for enumerators of all types was 114.86; this figure includes the 6 visits where no drug was sold. Table 5 (and Figure 7) summarizes the average cost of the drugs sold to enumerators of different types.

TABLE 5: AVERAGE COST OF DRUGS SOLD DURING PHARMACY VISITS BY ENUMERATOR TYPE

	FEMALE	MALE	TOTAL
APPEAR LESS AFFLUENT	111.43	111.22	111.32
APPEAR MORE AFFLUENT	117.45	118.02	117.80
TOTAL	115.29	114.18	114.86

Males (114.18) and females (115.29) appeared to pay approximately the same amount per visit for drugs to treat the fictitious case. However, enumerators who appeared more affluent paid 57% more for drugs than those who appeared less affluent (117.80 vs. 111.32). These differences held true for enumerators of different appearance from both sexes.

ORS accounts for 15% of the total cost of all drugs sold, while antidiarrheal products account for 75% of total cost (Figure 8). Products which contain an antibiotic, including both those which contain antidiarrheals and those which do not, account for 53% of total cost.

4. Communication between drug sellers and customers

Data were collected about three aspects of communication between pharmacy personnel and customers: questions about symptoms and history of the fictitious episode of diarrhea; explanations provided about medications sold; and other advice concerning treatment or prevention of diarrhea.

In 68 (77%) of the pharmacy visits, store personnel asked at least one question about the child's symptoms before medicine was recommended. The three most frequently asked questions were about the presence of vomiting (38%), the presence of a fever (35%), and whether the child had abdominal pains (34%). The tendency of pharmacy personnel in Tegucigalpa to enquire about important aspects of the illness appears considerably higher than has been found in other studies of this type.

In 88% of the pharmacies, some explanation about the medicines was provided. In 60 visits (73%), customers were told how to use the medicine. Another 26% of sales attendants described what the medicine was, while 13% reported on precautions or

possible side effects.

Over half of the pharmacy attendants spontaneously mentioned other important aspects of treatment. These recommendations included continuing or increasing liquids (36%), or urging the customer to visit a doctor if the diarrhea persisted (33%) or if the child began to run a fever (20%).

D. LESSONS LEARNED FROM THE PHARMACY STUDY

It proved to be feasible to conduct a rapid study of a sizeable sample of private sector pharmacies, which both validated the technique of using simulated purchases to collect data in Honduras, and which also yielded a number of interesting results.

Foremost among the results is the apparent finding that drug sellers indeed adjust their sales practices to the perceived ability of customers to pay. Since the principal group at high risk for adverse outcomes of diarrhea are the very poor, and since ORS is potentially an inexpensive product (although currently not widely available in inexpensive forms in Honduran pharmacies), there would seem to be some possibility of encouraging drug sellers to increase sales of this product preferentially to those most in need.

From the perspective of the development of RxDD methodologies, there were also a number of lessons learned:

1. Feasibility of pharmacy studies using simulated purchases

Enumerators of all socioeconomic groups were easily recruited, were trained quite rapidly, and all very easily grasped the purposes and techniques of the study. However, since many of the enumerators were involved in other occupations, it proved more difficult to coordinate their schedules than the health facility data collection team.

The training process, which was much simpler than the training for the health facility study, needed to be repeated a number of times since not all enumerators were able to begin together. Better coordination of the training process would lead to higher assurance of uniform results. The training program would benefit from the use of already completed encounter forms, and role-playing to model the simulated purchase visit to a pharmacy.

Enumerators appear to have been very conscientious in filling in the data collection forms. The sections on drugs sold, which are potentially the most difficult, were consistently

clear and complete. All enumerators included many useful comments on their forms about questions that were asked by sales attendants during the encounters.

It was found that supervision of the consistency and quality of the interactions between enumerators and drug sellers was very difficult to achieve, because of the difficulty in actually observing any of the visits taking place. There is no guarantee that same process was actually followed in each encounter.

One key methodological issue was whether certain enumerators had a tendency to lead or prompt certain types of questions. For example, one less-affluent appearing enumerator reported being asked about how much he was able to pay for drugs 6 of the 8 total times this question was asked of any enumerator.

2. Adaptability of the RxDD system

The data structures for this type of study proved simple enough that they lent themselves easily to spreadsheet tabulation. A model spreadsheet could be distributed with the RxDD system as an alternative to use of the main program if only analyses similar to those presented in this report are required, and if someone in the local environment is able to manage such a task.

The data structures of the RxDD program can easily handle the data on drugs sold, but the program would need to be adapted to incorporate the quantity of data per visit collected on communication between drug sellers and enumerators. This adaptation could be part of the final phase of development of the system, to be completed before the end of the year.

The incorporation of the large number of branded products into the drug files proved to be a cumbersome task, since a large number of decisions needed to be made on their correct classification. Many of the medicines were difficult to classify because of multiple ingredients. Since the Honduras list of basic medicines includes no antidiarrheals, an entire therapeutic category had to be added to accommodate those products. Antibiotics combined with antidiarrheals also posed problems because of their dual nature.

However, despite the difficulties, it proved readily possible to define a simplified sampling and data collection methodology for studying "prescribing" practices of pharmacy attendants in the private sector. The potential also exists for similar studies of the prescribing practice of private

sector physicians, although the methodologies to collect these data would be more challenging. Another application that is suggested by the results is the development of methods and standard report structures for using the RxDD system to evaluate the impact of retailer training activities.

IV. RxDD'S TECHNICAL REQUIREMENTS

There are certain types of data and specific hardware, software, and personnel capabilities required to implement the RxDD prescribing analysis system. These requirements are reviewed briefly below, and some difficulties that might be expected in introducing and maintaining the system are highlighted.

1. Elements of the basic prescribing visit

The essential element around which the RxDD system is organized is the prescribing encounter. The accurate recording of these encounters involves the collection of specific information about:

- a. Location: The system expects each record to include coded information about where the encounter occurred. Although not required, the use of location codes allows the comparison of data from different facilities or geographic areas.

If codes are assigned systematically and in a hierarchical way, it is possible to group information from related locations to obtain summaries (see tables in Annex J). Information about the population of locations can be also stored in a separate location file, and analyses of population-specific rates can be conducted.

- b. Patient: The information on each patient visit includes a required identifying code, and optionally the date of the visit, sex, and age. The identifying code for each visit must be unique within a single location to prevent multiple entry of the same cases, and to allow retrieval and correction of information. For each study, a system of assigning unique identifying codes needs to be developed.

In this study, each enumerator was assigned a number, and the patient identifying number was developed by appending an arbitrary sequence number for each case within a location to the enumerator's number. In this way, the possibility of duplicate numbers was avoided.

- c. Prescriber: The system can accept a prescriber identifying code that is optionally input with each case. In this way prescriber-specific analyses and the monitoring of practices at the prescriber level is possible. Additional data on the type of prescriber (for example, physician, nurse, pharmacist, etc.), level of training, or other characteristics of individual prescribers can be input into a separate provider file and used to group cases for analysis.

In this study, prescribers were generally able to be identified from the daily treatment logs. Identification numbers were assigned as cases from a new prescriber were selected. A note of caution should again be inserted about the need to sample a sufficient number of cases (at least 15-20) from each prescriber before drawing conclusions about quality of practice.

- d. Health problems: Up to three separate code numbers which identify diagnoses or symptoms can be accepted for each case. Enumerators in this study coded problems directly from a health problem list, but it is also possible for problems or drugs to be coded after the data are collected from text written on the data collection forms.

Cases in hospital, which often have complex combinations of diagnoses, can exceed the three-problem capacity of the program. In general, however, practices for complex problems are harder to analyze because they are difficult to classify. The program is better used to perform analyses on single-diagnosis episodes, or episodes where a common multiple-problem syndrome is presented, for example, diarrhea and acute respiratory illness.

- e. Drugs: Up to 10 drugs can be coded for each case. The code number is assigned based on information about product ingredients, concentration, package size, and route of delivery (for example, oral or injectable). Optionally, the number of units (pills, milligrams, bottles, depending on the medication) prescribed or dispensed can also be coded. Data on units permits the system to be used to carry out analyses of cost of treatment, units of product prescribed, or defined daily doses consumed.

2. Health problem classifications and drug lists

Before the system can be used, information on health problems and available drug products must be organized into lists, and

a coding scheme established to identify individual diagnoses or drugs. This can be a very difficult process, particularly for pharmaceuticals, and is in fact probably the most difficult procedure during installation of RxDD.

The system is distributed with master lists for both health problems and drugs. When the system is installed, it is possible to accept the basic organization of these lists, and also to accept one of the sets of coding conventions used to identify problems or drugs. Alternatively, users can assign their own alphabetic or numeric codes. Finally, it is possible to enter a completely new system for organizing and coding problems and drugs.

As mentioned above, RxDD expects certain conventions to be followed in the identification of drugs. For example, the drug list should be developed so that each code identifies a single product unique in ingredient, concentration, package size, and route of delivery. Such specificity is necessary to allow detailed analysis by RxDD of costs, or of product utilization. Unfortunately, the lists of basic drugs in many countries have not been developed to follow such conventions.

During this field test, a number of modifications were made to the coding schemes of the Honduras List of Basic Drugs to allow them to be accepted by the program. The program will now be modified to be more flexible in certain areas to better accommodate such problems in the future. In addition, the Honduras List is currently undergoing revision by the Pharmaceuticals Unit. If the MOH decides that they would like to install the finished RxDD system for future use, the coding schemes used in the field test would need to be revised, and the Metropolitan database updated accordingly.

3. Hardware needs

The hardware requirements of RxDD are similar to many other software products currently on the market. The system requires an IBM-compatible PC with at least 512K of memory. The program will run on older 8086-based PCs, but program operations are quite slow without access to a 286 or 386 microprocessor.

The program files occupy about 700K of disk space. The database and reference files for the Metropolitan sample of 1,080 cases occupy approximately 1 megabyte. To be safe, the system should have available at least as much free disk space as the size of the current data and reference files to write temporary files during execution, or in this case, another 1

megabyte.

Although the program runs from diskette, the execution speed is very slow because the program reads and writes data to the disk quite frequently. In addition, the number of cases able to be stored on the data and reference file disk when run from a diskette should be limited to a few hundred in order to avoid running out work space.

4. Staffing and training needs

The staffing for the field test is described in detail above in the sections on the health facility and pharmacy studies. For the health facility study in particular, the training level of personnel used was very high, since the time line for the work was short, and the purpose of the field test was to determine the feasibility of prescribing analysis under the best of circumstances.

When the system is implemented as part of the routine operations of a Ministry of Health, there are certain functional staffing needs that must be met to allow successful operations. These needs include:

- a. a medical advisor or coordinator having general familiarity with pharmaceutical therapies and with the classification of health problems;
- b. one or more persons familiar with the classification of pharmaceuticals and the organization of drug lists, including identification of appropriate therapeutic categories, recognition of generic equivalencies among products, and categorization of pharmaceuticals by concentration of active ingredient and dose form;
- c. data collectors with either previous training or general aptitude in the recognition of pharmaceutical names, medical diagnoses, and associated abbreviations that are commonly used on medical records or prescriptions;
- d. data entry personnel who have basic understanding of computer terminology, but no special expertise in programming, and with the capacity to be trained to recognize obvious errors in the coding of drug information;
- e. a person familiar with the administrative and technical objectives of the prescribing analysis process of and the use to which the information coming from the system will

be put, to supervise data collection, coding, and report preparation.

- f. optionally, a person familiar with dBaseIII-compatible file structures and modest ability to program in the dBase language, who would be able to manipulate files, correct data problems, and prepare analyses in ways that are not permitted by the program.

V. POSSIBILITIES FOR FOLLOW-UP ACTIVITIES

In discussion following the presentation of preliminary results of the field test to Ministry of Health officials (see attendance list in Annex Q), a number of ideas related to follow-up of the field test activities and possibilities for future uses of the RxDD system in Honduras were addressed. The feasibility of these ideas, and their place within the general program of the Ministry of Health, is clearly the subject for further discussion and decision within the Ministry.

The ideas below are noted here as reference points for those who sponsored or participated in this study, and for the MOH officials who attended the debriefing.

1. A meeting to communicate the results of this study to health facility directors

The level of interest in this study by personnel in the MOH facilities where data were collected, and their cooperation in assembling treatment logs and locating medical records was exceptional. Many individuals went far beyond the requirements of their job to assist the enumerators to do their work effectively.

A meeting to communicate the results of the study to the directors of the CESAMOS was mentioned as one way of capitalizing on the interest that it raised. Such a meeting could begin to focus attention on the treatment practices in the region for which there is still substantial need for improvement.

It would seem important to approach the issue of changing inappropriate prescribing behaviors in a positive, participatory manner. Experiences in other countries suggest that when medical personnel have the chance to discuss among themselves the need for specific standards of treatment, and when they are actively involved in the development of these standards, that the process of change occurs much more quickly and lastingly.

2. Comparison studies in clinical facilities in other regions

One question raised during the discussion was whether the generally favorable results related to prescribing for diarrhea in Metropolitan Region health facilities would be found in other regions of Honduras. One way to answer this question that was proposed would be to design a similar study of health facilities in another region.

Such a study would involve essentially the same activities as described above. If the record-keeping systems in the region chosen were to be as organized as those found in Metropolitan Region, it would again be possible to examine a year of retrospective prescribing episodes.

Key decisions that would be faced in designing such a study would be:

- a. Who would be responsible for coordinating the effort on an operational level, including supervising of data collection, coding, design and preparation of reports?
- b. What level of personnel would be used to collect the data, and how would their speed and reliability differ from the very well-trained enumerators used in this study?
- c. Where would the software be installed, and who would enter the data and maintain the system?
- d. How would the drug list used in the field test be updated?
- e. Would the sample focus on acute diarrhea alone, or would it also include parasitic diseases as did the field test?

3. Implementation of RxDD as a monitoring tool in Metropolitan Region

Considerable interest was expressed during the debriefing about the possibility of using RxDD as a tool for monitoring prescribing behavior over time, and also for targeting different conditions besides diarrheal disease. The benefit of using RxDD in such a capacity is that it would be possible to integrate actual data on adherence to norms into regular supervisory activities on a regional basis.

Before discussion of other issues that would need to be considered in such an application, there is an important point

to make about the difference between the type of samples needed for monitoring and the design used for the field study.

The sample for the field test was designed to be able to characterize prescribing patterns in the Metropolitan Region as a whole, and also to contrast these patterns between CESAMOS and CESAREC. Since both acute diarrhea and parasitic disease cases were included in the sample, and since no restriction was put on multiple diagnosis cases (which are more difficult to analyze), the number of simple cases per facility of either acute diarrhea or parasites was somewhat small.

An application of RxDD for monitoring would need to collect a sufficient number of homogeneous cases at the level to be monitored to get representative estimates of practice. If CESAMOS or CESARES are to be the unit monitored, this would imply that at least 15-20 cases of the type of interest would need to be collected during each monitoring cycle. If the individual prescriber were to be the unit monitored, the data needs would rise accordingly. The ability of the data processing component of such a monitoring system would be an important factor to determine its size and feasibility.

Other issues to consider in using RxDD as a monitoring system include:

- a. Which diagnoses are to be considered, and how can a possible tendency to shift diagnoses to an unmonitored category be avoided?
- b. On what cycle would the monitoring be done? Monthly? Quarterly? Yearly? Again, the capability of the data processing component is a limiting factor.
- c. How would data be collected? Would it be retrospectively, using treatment logs as in the current study, or prospectively, using a method of gathering information on current episodes of care? Who would be available to retrieve the data in either case?
- d. Would there be an interest in examining issues such as dosing of drugs, or cost of treatment? If so, the comments in the next section on the need to link to pharmacy data would apply.
- e. What standards for determining inappropriate practice would be set? What percentage of cases not following the norms of practice would result in a supervisory contact?

Setting this standard too low would result in an excessive number of contacts about cases where the data were simply coded wrong, or where there were extenuating circumstances. This would be an issue that might be addressed through analysis of the first wave on monitoring data.

- f. How would factors like stockouts of key products, or donations of therapeutic alternatives to the pharmaceuticals on the standard treatments, be handled in evaluating practices?

4. Study of costs of diarrhea treatment

Because data on quantity prescribed were not recorded in medical records in a reliable way, it was not possible to estimate the costs of treatment for cases of diarrhea or parasite infestation from the data collected during the field study. In addition, even if data on amount prescribed were present, there would be no assurance that the drug was actually in stock at the pharmacy, and dispensed in the amount indicated.

In the Metropolitan Region, an analysis of costs, and of the difference between prescribing and dispensing of drugs, would require linking the data from the treatment log with prescriptions filled and collected at the pharmacy. The situation may prove to be different in other regions, where the structure of record-keeping may be different.

Particular issues to consider in planning a study linking pharmacy records and treatment logs would include:

- a. Could enough data be linked retrospectively to make such an approach worthwhile? Although pharmacies save the blanks from filled prescriptions, they are not organized in retrievable way, but rather are bound together on a daily basis. How long would it take to find in the daily stacks the proper prescriptions to be linked with a randomly selected case? What would be the proportion of prescriptions that cannot be found?
- b. Who would be responsible for collecting the prescription data? Personnel at the pharmacy? Personnel from the medical staff? From the regional office?
- c. If it is determined that data would be collected prospectively, how would the process be structured? Would an enumerator search the prescribers' treatment

logs for appropriate cases, and then try to link to the prescription in the pharmacy? Could prescribers be encouraged to indicate diagnosis on the prescription? Could randomly selected patients waiting to receive drugs at pharmacies be interviewed and their prescriptions examined?

- d. Are there potential areas of conflict that might arise between the pharmacy and the medical staff as a result of the monitoring of prescriptions?
 - e. What time period would the study cover? If done retrospectively, the longer the period, the costlier would be the process of linking records.
5. Follow-up activities for the pharmacy study

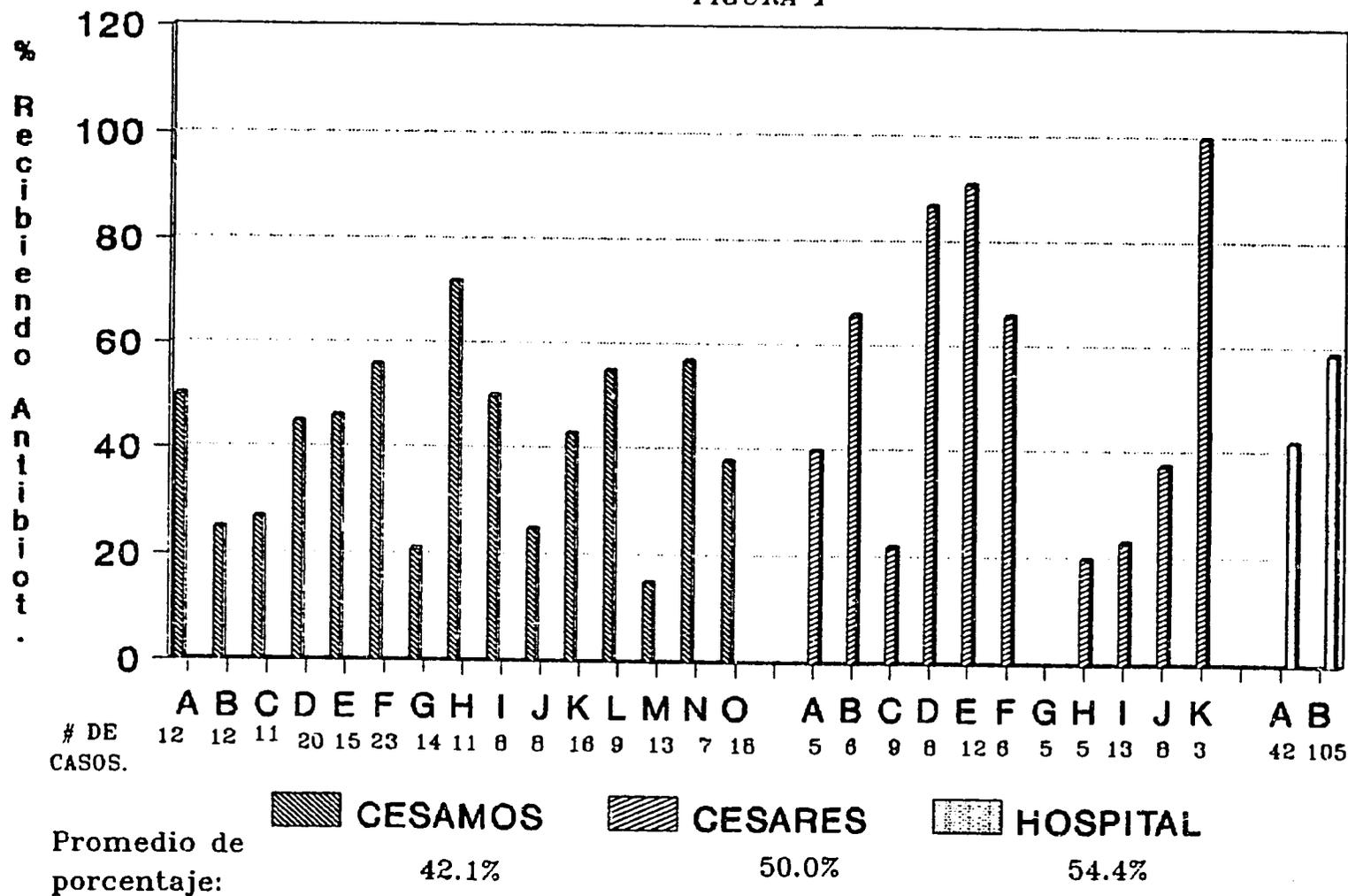
The discussion of the results of the pharmacy study was abbreviated because other commitments required the debriefing to end. The only option for a follow-on activity that was discussed was trying to find out whether both pharmacists and untrained pharmacy attendants had similar behavior patterns.

Although there were many problems with the observed drug sales behavior of pharmacy personnel in the area, the results were far more encouraging than similar studies in other countries. There were a significant number of visits where drugs were not sold for the correct reasons. ORS was sold in over 25% of visits, even if it was primarily in a form too expensive for most individuals at risk. There was a good deal of appropriate questioning of the customers about symptoms, and explanations about the products sold.

Two possible activities could be considered, depending on MOH interest in pursuing activities in the private sector and on available resources. The first would be to carry out a qualitative study on why drug sellers behave the way they do. There is certainly reason in the study results to believe that profit motivation is not their only motivating factor. Following this activity, if there appeared to be a base of good diarrhea treatment practice upon which to build, a program to carry out pharmacy staff training might be a worthwhile undertaking. The methods used in this field test to select a sample and collect data could be appropriately used in the evaluation of such an activity.

USO DE ANTIBIOTICOS EN CASOS DE DIARREA AGUDA SIN
 DIAGNOSTICO DE PARASITISMO U OTRAS CONDICIONES.
 COMPARACION DE LOS ESTABLECIMIENTOS DE SALUD EN LA REGION
 METROPOLITANA.

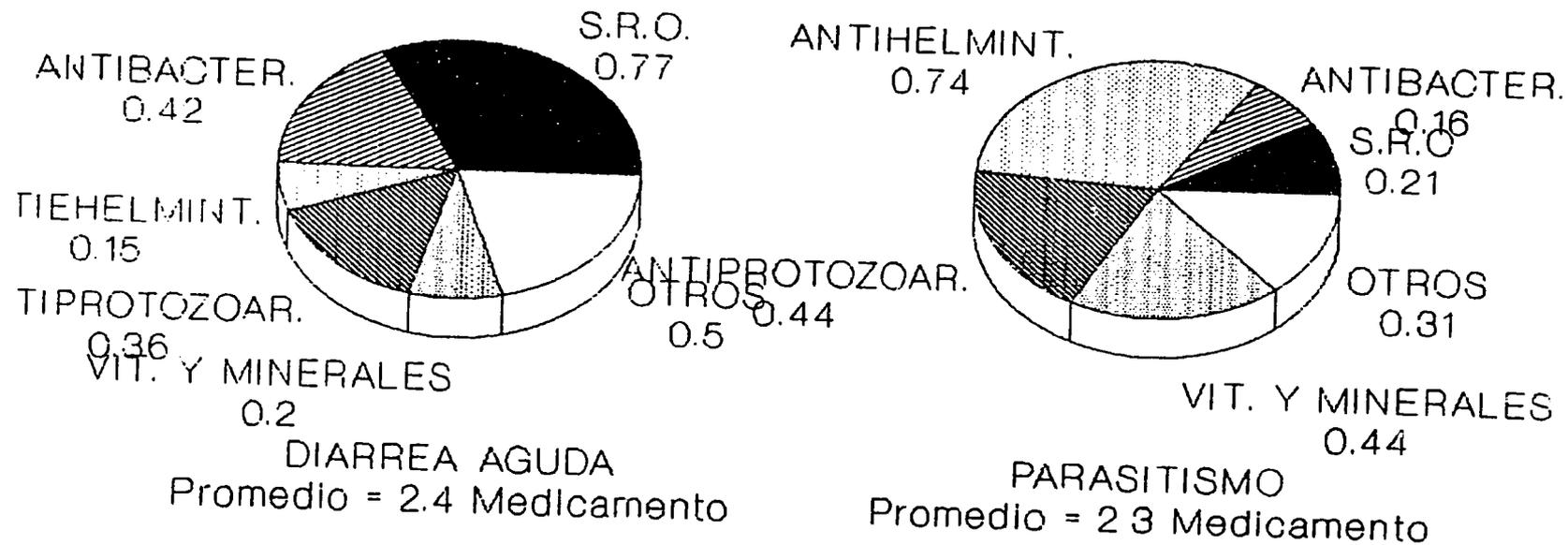
FIGURA 1



32

GRUPOS TERAPEUTICOS USADOS PARA EL TRATAMIENTO DE DIARREA
 EN NIÑOS MENORES DE 5 AÑOS EN TODA LA REGION METROPOLITANA:
 CMO, CSR, CONSULTA EXTERNA DE HOSPITALES.
 PROMEDIO DEL NUMERO DE MEDICAMENTOS POR CASO

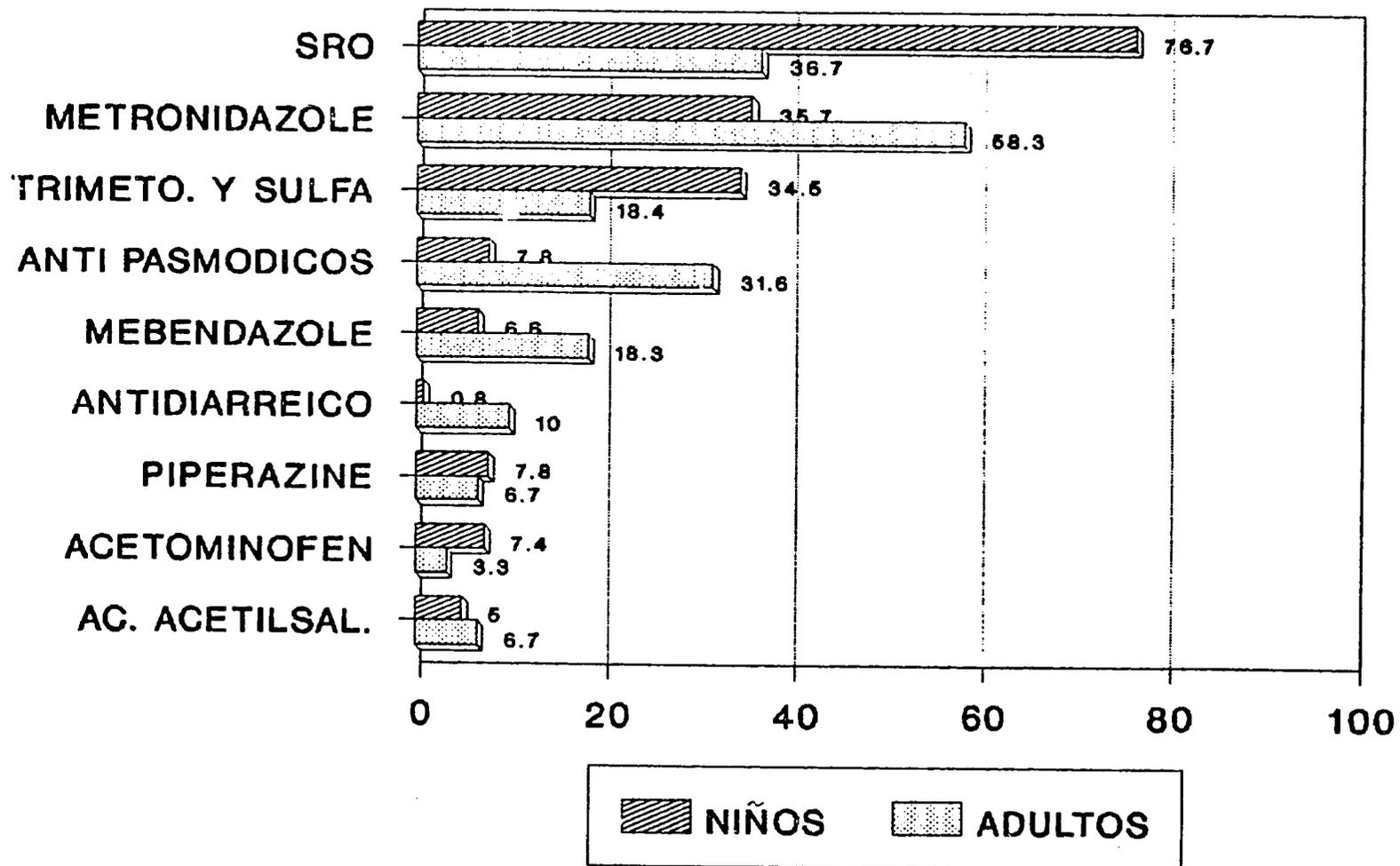
FIGURA 2



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GUIA DE PRODUCTOS UTILIZADOS PARA EL TRATAMIENTO DE DIARREA
 POR EDAD EN LOS ESTABLECIMIENTOS DE LA REGION METROPOLITANA
 CESARES, CESAMOS, CONSULTA EXTERNA DE LOS HOSPITALES
 CASOS AGUDOS DE DIARREA SIN OTRO DIGNOSTICO.

FIGURA 3

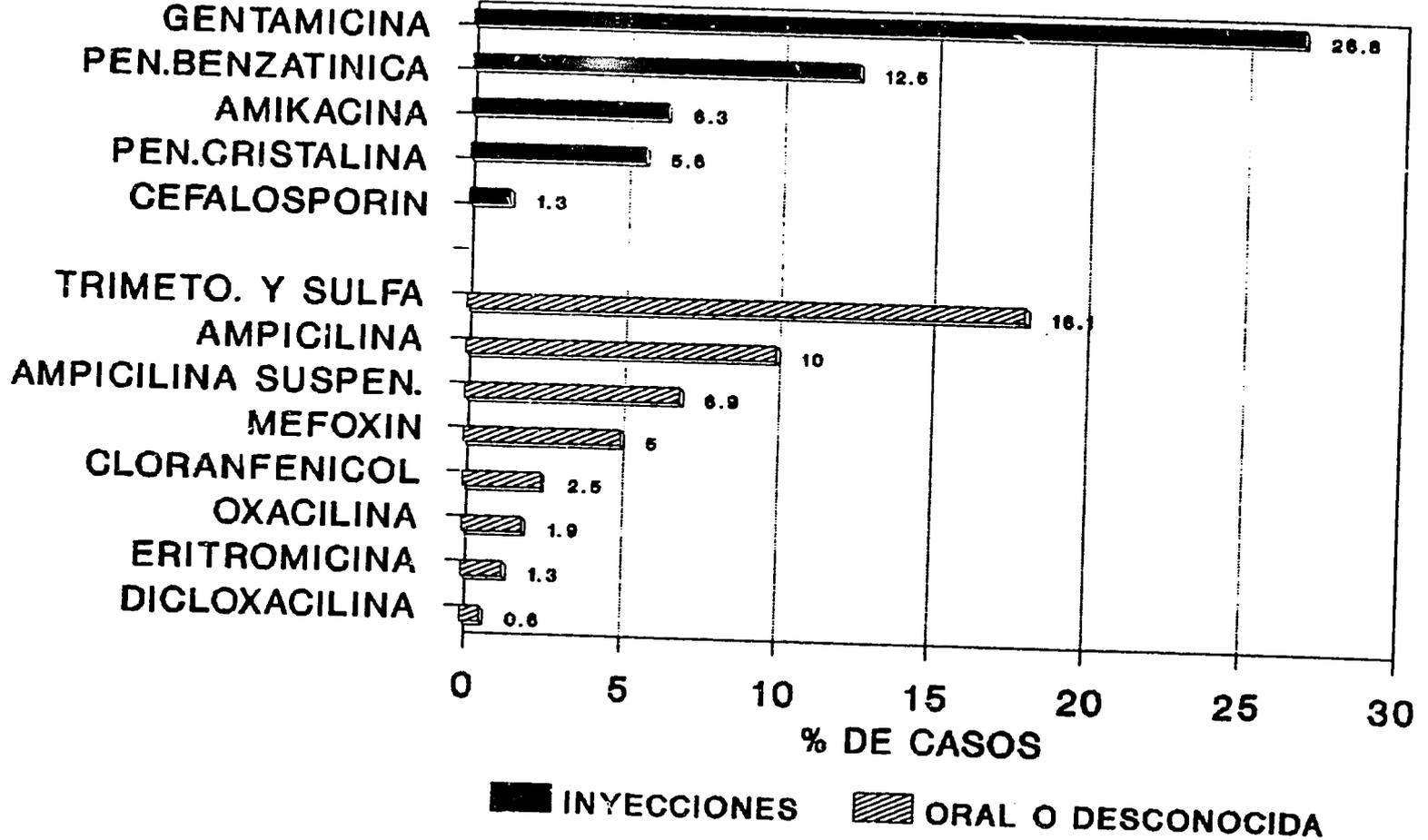


24

USO DE ANTIBIOTICOS EN CASOS DE DIARREA EN LA EMERGENCIA
Y PACIENTES HOSPITALIZADOS.

% DE CASOS RECIBIENDO EL PRODUCTO.

FIGURA 4

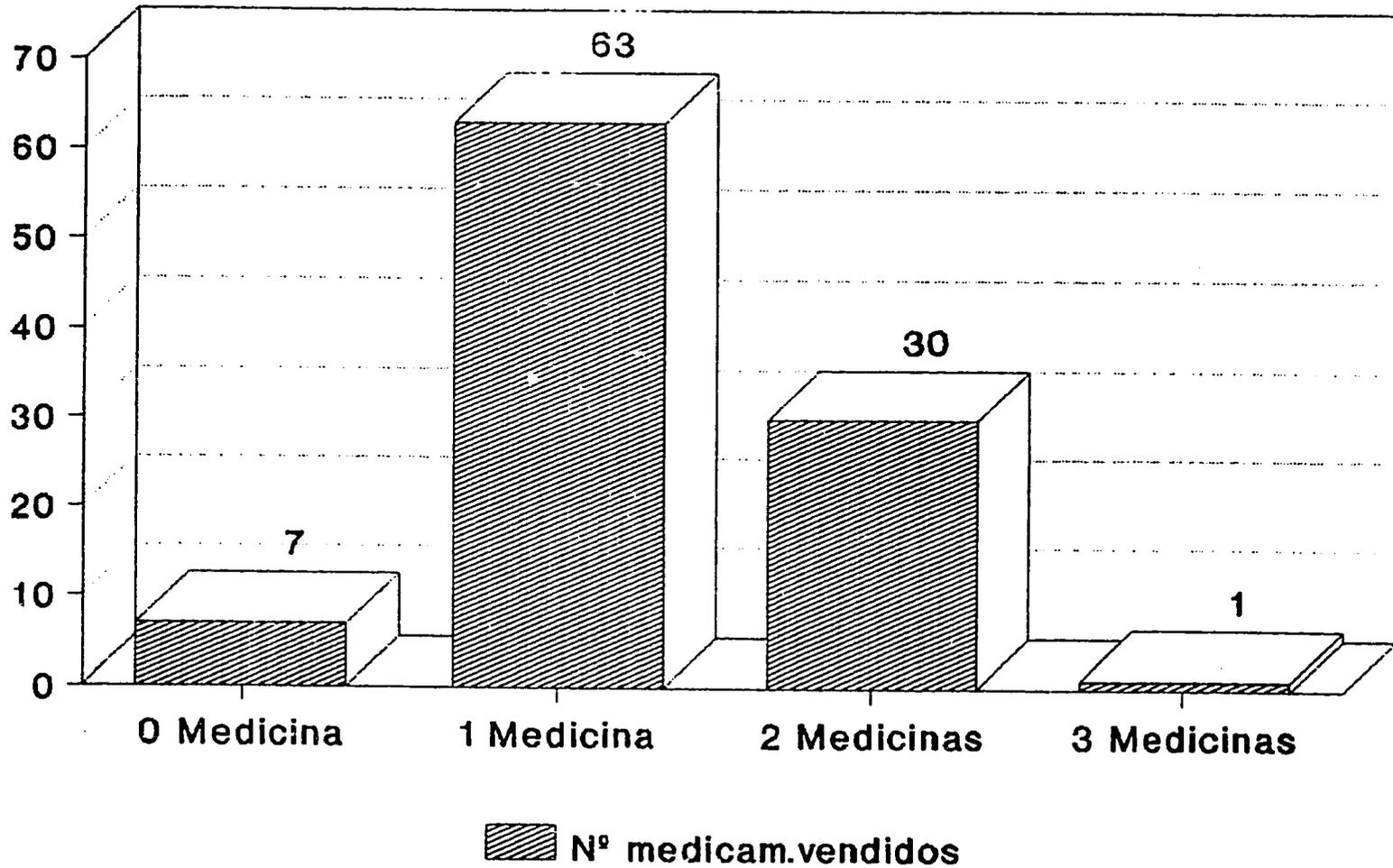


Handwritten signature or initials.

NUMERO DE MEDICAMENTOS VENDIDOS

% de ventas de 1 a 3 medicamentos

FIGURA 5

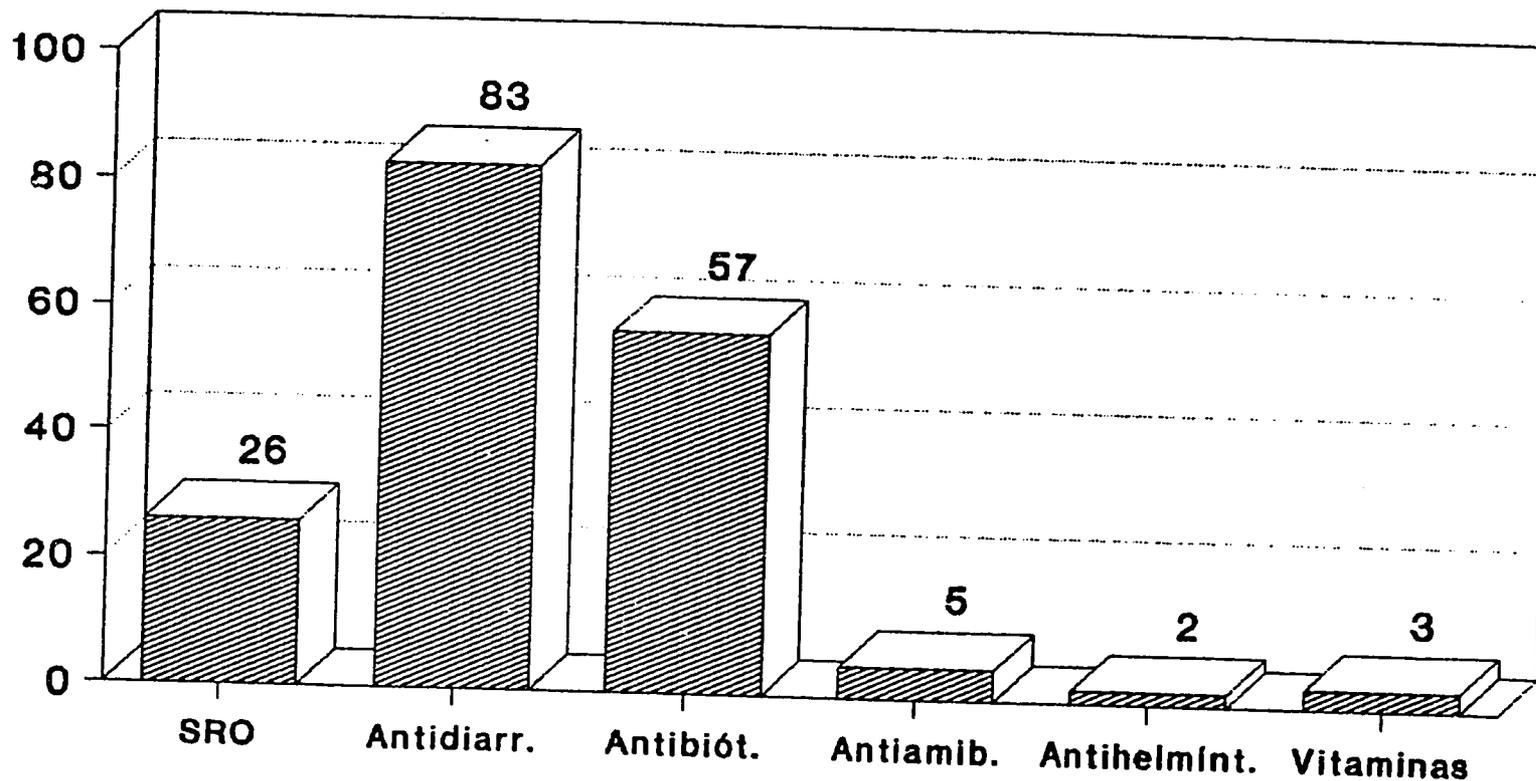


2/2

TIPO DE MEDICAMENTOS VENDIDOS

% de todos los productos vendidos por categoría.

FIGURA 6



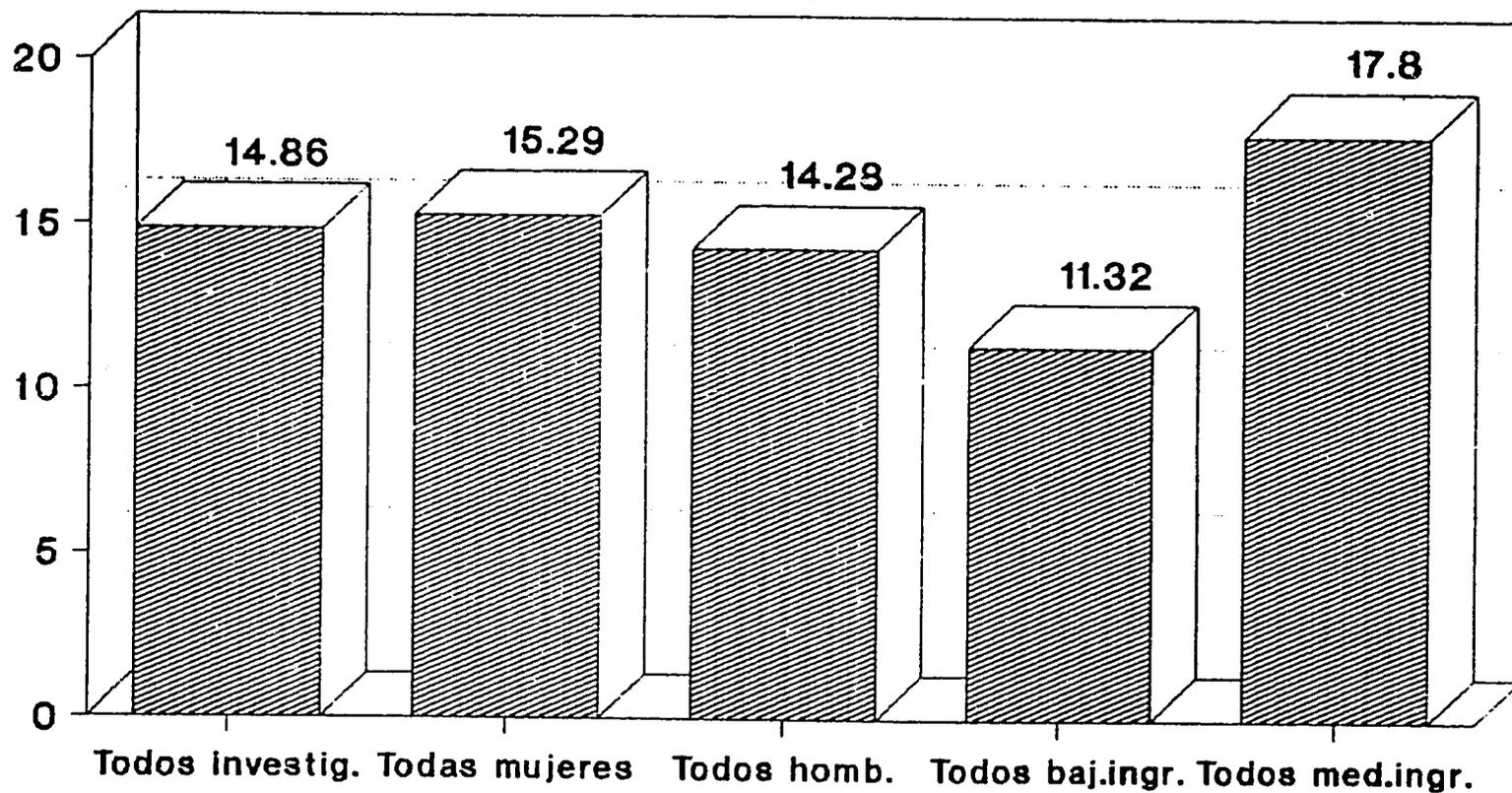
 % todos prod.vendido

Antidiarréicos y antibióticos se sobre imponen.

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COSTO PROMEDIO DE MEDICAMENTOS VENDIDOS por Tipo de Investigador

FIGURA 7



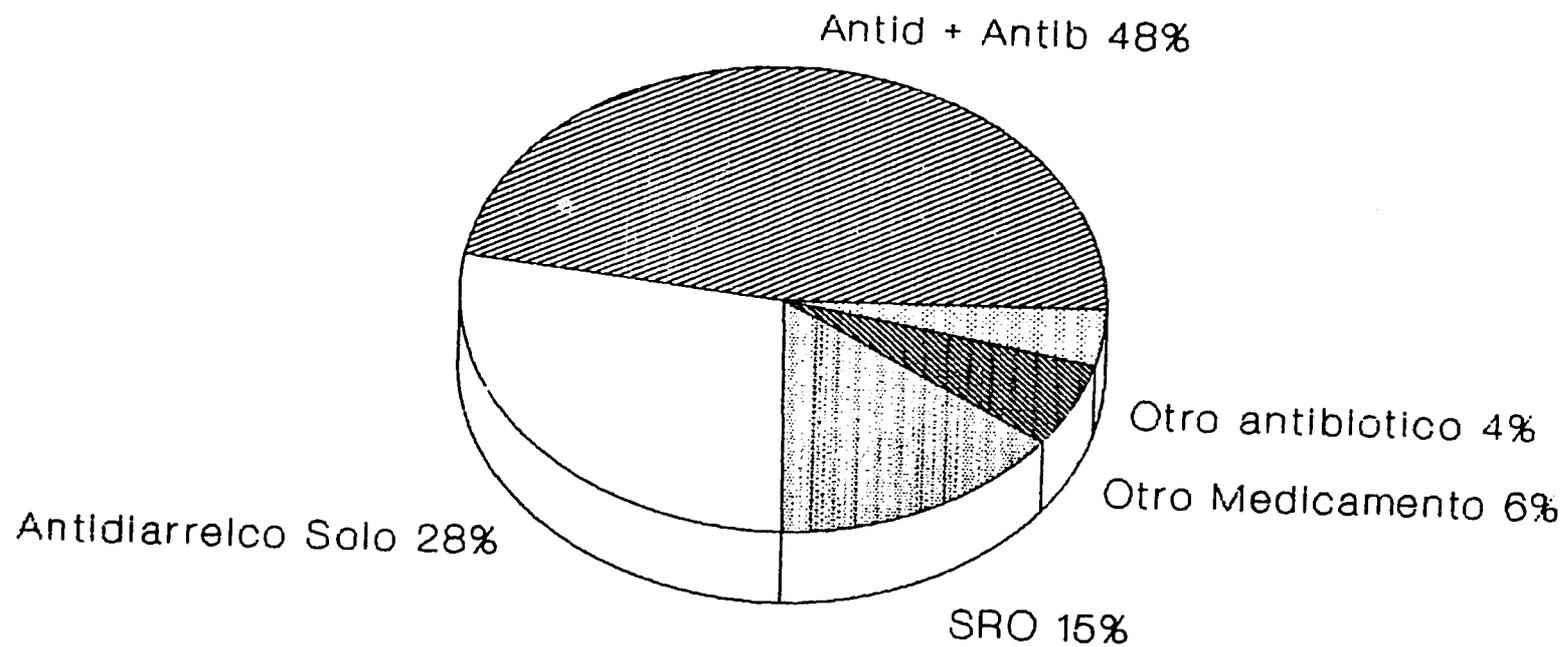
 Costo en Lempiras

Cambio \$ 1 = L 5.40 (Honduras CA)
Mayo 1991.

28

% DEL COSTO TOTAL DE MEDICAMENTOS por categoría terapéutica

FIGURA 8



65% de antidiarrealcos son antibióticos

A. Scope of Work: Evaluation of Prescribing Practices for Diarrheal Disease in Honduras

SCOPE OF WORK

EVALUATION OF PRESCRIBING PRACTICES FOR DIARRHEAL DISEASE IN HONDURAS

BACKGROUND

Proper case management of diarrheal disease calls for administration of ORS or home fluids for all cases and antibiotic and antiamebic drugs only in the minority of cases where their use is clearly indicated. In addition, use of antidiarrheal drugs is discouraged, especially for children in the five years and younger age group. Information gathered in a number of countries shows that health care providers frequently do not follow these guide lines, often failing to prescribe ORS and indiscriminantly prescribing antibiotic, antiamebic and antidiarrheal drugs. These practices often persist among care provider populations with high degrees of awareness of the dangers of dehydration and the role of ORT and ORS in treating dehydration. These irrational practices are life threatening in some cases and result in substantial waste of limited pharmaceutical resources.

Many countries are beginning to experiment with training and communications interventions designed to change prescribing behavior. Managers who sponsor these efforts find that their first problem is to be able to describe the inappropriate behavior that takes place. For example, a sample of patients with simple diarrhea in health centers in Indonesia generated the following profile of problems

- * Only 46% of under fives received ORS
- * 88% of all patients received Enteroviaform
- * 40% of under fives received tetracycline
- * The average patient received 1.7 antibiotic/anti-amoebic products
- * Altogether, the average patient received 4.7 drugs

This information is useful in that it describes precisely, by product, a number of general problem behaviors such as under use of ORS; over use of antibiotics; use of antidiarrheals; and use of too many drugs. Collecting and analyzing the data required for producing such summaries is a complex task. When done manually, this work is time consuming and highly susceptible to error.

SOFTWARE FOR PRESCRIPTION ANALYSIS

To support efforts to improve prescribing practices, PRITECH is developing and testing computer software programs that quantify prescribing practices and produce graphic summaries of important trends. This work began in Indonesia in 1989 with the introduction of ORSMAP, a program designed to focus on prescribing practices for diarrheal disease. (This program produced the information summarized above.) Work with the ORSMAP was so promising that PRITECH has launched a follow on project to modify and enhance the program for world wide use. The output will be "RXDD," which will be ready for field application in the near future. RXDD accepts data on prescribing practices for diarrhoeal disease, organizes it into data base files, and then produces twelve graphic reports on:

- * Frequencies of different drugs prescribed, by product and by therapeutic category;
- * Costs of drugs prescribed, again by product and therapeutic category.

Examples of these graphics are appended.

As RXDD becomes ready for use, it should be noted that this second iteration program has been set up to serve as a platform for still another and more versatile program which will be ready in about August 1991. This next program, to be called simply RX, will have features not found in the earlier iterations. These include capacity to analyze data for all disease categories, and not just diarrhea; capacity to analyze other health care variables such as type of provider or types of services given; and capacity to produce a far wider range of reports than RXDD can produce. In addition, care will be taken to make RX as user friendly as possible, so that it will be useful in settings where skill levels for computer operations are modest.

In the near future, PRITECH will request AID's approval for developing a proposal to produce, test and apply the RX program. This will form part of a broader program to improve health worker prescribing patterns, not only for diarrhea, but for other priority problems, such as, acute respiratory infections and skin diseases. The very next step in the sequence of events, however, is the immediate application and testing of the RXDD program. PRITECH is proposing to undertake this step in collaboration with the Honduras CDD Program.

RXDD'S UTILITY FOR HONDURAS

PRITECH feels that the RXDD program is of great potential value to the Honduras CDD Program. The eruption of cholera in South America brings with it the possibility of outbreaks this year in Honduras and other Central American countries. Should this occur, it will

be essential to optimize use of the pharmaceutical products used in treating diarrhoea. By applying RXDD, it will be possible to understand how care providers are prescribing for diarrhoeal disease. Should corrective measures be required, it would be possible to develop and communicate precise messages for improvement, in advance of any large scale outbreaks. Such an approach has the potential to improve management of drug supplies, not only for outbreaks, but also for routine situations. It should be noted that RXDD is so designed that it can be quickly set up in Spanish, or any other language that may be displayed with Latin characters.

Based on experience in Indonesia, it is clear that the program can be used flexibly in the following ways:

- * For carrying out baseline studies of prescribing practices. RXDD provides precise quantitative descriptions of how care providers use ORS and other drugs for treating diarrhea. The program can summarize findings by province, district or facility, enabling national CDD program managers to present findings to local managers on a locality by locality basis. Such baselines are useful for assessing the extent to which case management policy is respected and as starting points for measuring change.
- * For evaluating the effectiveness of communications for improving prescribing practices. There are several options for intervening to improve inappropriate prescribing practices. Examples include conventional training sessions, prescription auditing plus feed back, detailing approaches, and distribution of technical bulletins. In order to know whether or not any of these work it is necessary to precede interventions with baseline studies and follow them up with comparable assessments to measure change.
- * For routine monitoring of prescribing practices. Periodic samples of patient contacts for diarrhea can be taken from clinical facilities and forwarded to higher levels for analysis. This would provide district, provincial and national managers with time series records of prescribing practices. Such information would permit managers to systematically follow up with problem locations.

A principal aim of the proposed consultancy would be to introduce RXDD to CDD Program managers and explore with them ways in which efficient analysis of prescribing practices could be used to (a) improve quality of care and (b) reduce waste.

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Accordingly, it is proposed that a two person team visit Honduras in the near future to demonstrate the program and make a formal presentation of their findings.

PERSONNEL/LEVEL OF EFFORT/DATES

Drug Management Specialists: James Bates and Dennis Ross-Degnan, working 18 Person days each, between April 21 and May 10, 1991.

Public Health Physician: Dr. Lilian Dominguez, working 18 person days between April 21 and May 10, 1991.

WORK TO CARRY OUT

1. Provide for appropriate Ministry of Health and USAID Staff a detailed briefing on the utility of prescription analysis for supporting CDD and other health care activities. This can be illustrated with a slide show of work recently carried out in Indonesia.
2. Carry out a prescription analysis for a sample of dispensaries and health centers. This activity will require the following tasks
 - * Either retrospective or prospective data collection;
 - * Coding the data collected;
 - * Entering the data into the program;
 - * Running the program and producing graphic reports of findings.
3. Carry out an analysis of drugs sold for diarrhea at a sample of retail pharmacies. In general, this requires the same steps listed for the previous activity. Most likely, data will be collected prospectively using a simulated purchase survey.
4. Make a formal presentation of findings for MOH and USAID staff. The presentation should include the results of two applications of RXDD and recommendations about how the program could be used to support CDD activities in Honduras.
5. Prepare a report documenting the work carried out and making recommendations for follow on activities.

ILLUSTRATIVE SCHEDULE

Scheduling the work for this three week consultancy depends on circumstances in Honduras. It should, however, break down approximately as follows:

- * First Week: Introductory briefing, review of information available in public and private sectors; engagement and training of survey enumerators and data input personnel.
- * Second Week: Data collection; coding and input into the RXDD Program; running the program to produce summaries of prescribing/sales practices.
- * Third Week: Assessment of appropriate applications for Honduras; formal presentation of results; and production of final report.

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B. Synopsis of the Objectives, Inputs, and Outputs of the R&DD Field Test

RXDD'S HONDURAS FIELD TEST:

NOTES ON OBJECTIVES, INPUTS, AND OUTPUTS

I. ANTECEDENTS

PRITECH has been supporting development of computer software programs to analyze drug prescribing for diarrhoeal disease since 1989. The first program, called ORSMAP, was developed, field tested and installed in Indonesia during the period February to March, 1989. Based on apparent success in Indonesia, PriTech decided to develop a second generation program incorporating a number of modifications and enhancements which would make the product suitable for worldwide use. PRITECH tested the new program, called RXDD, in Honduras during a three week period in April and May 1991.

The Indonesia field test of ORSMAP in 1989 had been carried out with two national CDD Program staff persons. Both of these individuals had previously worked as data collectors and coders on major drug prescription analysis studies. Furthermore, the Ministry unit where they worked was well endowed with computer equipment and both staffers were proficient Lotus 123 and had limited capacity to use dBaseIII+.

II. OBJECTIVES OF RXDD'S FIELD TEST

The field test of ORSMAP was played out with a well-stacked deck:

- Much was already known about the types of data available and how to recover them;
- The CDD staff who participated had already acquired key skills necessary to operate the program effectively.

Testing ORSMAP with experienced CDD Program staff was acceptable, however, because that bureau was the program's intended home.

Field testing RXDD was seen as a different matter. PRITECH views RXDD not just as a computer program, but rather as a complete prescription analysis system, which embraces routines for

- Sample selection
- Data collection
- Coding
- Data processing and graphics production

Additionally, RXDD has been developed with an eye toward worldwide applicability. This means that the processes required for carrying

out the tasks summarized above must be designed to be adaptable to the realities of data availability and personnel capacities in a wide variety of settings.

The general objective of RXDD's field test was to take the product into a new environment and attempt to carry out all of the system's basic routines. Within this overall objective, there was a further objective to test the feasibility of both public sector and private sector interventions. Achieving these objectives would require quickly completing a number of activities. The logical sequence for this work would be:

- Briefing Ministry of Health decision-makers;
- Formulating study designs;
- Developing data collection formats;
- Developing approaches for identifying cases and collecting data;
- Recruiting and training data collectors;
- Collecting and coding data;
- Recruiting and training data input personnel;
- Entering the data and producing tables and graphic reports.

III. HOW THE WORK WAS CARRIED OUT

A. Funding

PRITECH provided an adequate budget for the Honduras field test, including funds for:

- Three consultants to work eighteen person-days each;
- Local data collection and input personnel;
- Transportation for all parties.

B. Dates

The Honduras field test took place from April 28 to May 16, 1991. The consultants worked full time throughout this three-week period. Data collection and data input personnel were hired on an as-needed basis.

C. Ministry of Health Support

The Ministry of Health was very quick to approve the RXDD field test when PRITECH proposed it. Interest in diarrhoeal disease management issues was stimulated to some extent by concern about a possible eruption of cholera in the country. The Division of Maternal and Child Health was the direct sponsor. Division staff showed special interest in RXDD's potential use as an on-going monitoring tool.

Despite their apparent interest, Division staff were unable to participate directly in the field test. This was because they had prior commitments for a national vaccination campaign. Division staff were, however, very punctual about arranging in and out briefings, and they also asked about the possibility of financial support for follow-on work with RXDD.

D. Health Sector II Project Support

PRITECH'S parent organization, Management Sciences for Health, manages a long term USAID funded project in Honduras called the Health Sector II Project. Health Sector II has offices adjacent to the Ministry and employs a large support staff. Health Sector II provided the RXDD team with the following support:

- Office space for the duration of the field test;
- Help with recruiting data collectors and renting cars;
- Use of two experienced computer data processing staff persons (totaling about 9 person days);
- Use of computers and printer;
- Photo copy services.

E. Study Designs and Work Schedule

The RXDD team designed two studies on which to base the field test. The first study analyzed prescribing practices in a sample of 2 hospitals, 15 physician-staffed health centers and 11 health posts staffed by auxiliary nurses in the Metropolitan Region of Tegucigalpa. This study analyzed data on samples of patient contacts collected retrospectively from facility records.

The second study analyzed drug sales practices for diarrhoea in a sample of 50 commercial pharmacies also located in Tegucigalpa. Data were collected prospectively by enumerators posing as parents of children with diarrhoea. Data collectors were given a scenario describing a child's episode of diarrhoea, and instructed to purchase the drugs recommended by drug sellers. To assess the effects of customers appearance on drug sales, the enumerators were divided into four groups: males and females who appeared less affluent; and more affluent-appearing males and females.

Outlines of the two studies are appended as Enclosure Two.

Work on these studies was distributed as follows over the three week duration of the field test:

- Week One: Set Up, including such activities as formulating study designs; making contact at the Ministry; arranging clearance letters; translating RXDD into Spanish; adapting local drug and health problem lists for use with RXDD; printing data collection forms; and recruiting and training enumerators for the clinics study.
- Week Two: Data Collection, including collecting data for the clinics study; recruiting and training enumerators for the pharmacy study; collecting data for the pharmacy study; cleaning and coding of data for both studies; coordinating and troubleshooting the work of the two data collection teams; continued work on drug and health problem lists; training data input personnel; carrying out data input; and data validation and correction.
- Week Three: Analysis and write up, including analyzing data for both studies with RXDD; briefing MOH staff on the results; and preparing the final report.

F. Data Collection Personnel

The two studies collect data in very different settings using very different methods. The clinics study was by far the more labor intensive of the two because it collected information on 1,080 patient contacts distributed among 28 clinical facilities. Data for this study were recovered from practitioners' daily registers and patients' medical records. Efficiently sifting through all this paper required the technical background to understand pharmaceutical and diagnostic terminology, plus the patience to decipher hand written entries.

For this work, the study team recruited five enumerators. Four of them were graduate pharmacists and the fifth had worked as an administrator on a public health project. One of the pharmacists had worked as a sales representative for a drug wholesaler. In sum, this group was especially well qualified. Furthermore, they were paid generously by local standards, that is, L70.00 or \$13.00 per day for 1 training day and 8 data collecting days plus a bonus of 1 day's pay for satisfactory completion of all work on time. This amounts to a total of L 631.00 or \$117.00 per enumerator.

The study team recruited 9 data collectors for the pharmacy study. The data collection for pharmacy study was light work compared with the clinic study. The only qualifications required were ability to role play the parent of a child with diarrhea; ability to fill out the pharmacy visit form and more affluent or less affluent appearance. The outward indicators of class-based appearance were clothing styles and dental work. The pharmacy study data collectors were paid L35.00 or \$6.50 for attending a half day training session, and then L14.00 or \$2.60 for each visit performed. On average, each data collector visited 8 pharmacies, so that the total compensation per collector was L176.00 or \$32.50.

Transportation support for the two data collection teams was arranged as follows: For the clinic study team, 2 rented cars were assigned full-time to shuttle enumerators between sites throughout the data collection period. Members of the pharmacy study team were given cash advances for purchase of drugs and taxis in L100.00 or \$19.00 increments, and so they paid for transportation on an as needed basis.

A summary of the expenses actually incurred for data collection is appended as Enclosure Three.

SUMMARY OF OUTPUTS

The study team was able to accomplish the following within the framework of time and resources described above:

- Design and testing of data collection forms for organizing data collected retrospectively from clinical records and data collected prospectively from visits to retail pharmacies;
- Development of approaches to training enumerators for both retrospective and prospective data collection;
- Development of strategies for drawing samples of patient contacts from clinical records and for drawing samples of retail pharmacies.

- Adaption of MOH drug list (Cuadro Basico) into format suitable for use with RXDD.
- Adaption of the WHO Health Problems list for use with both local primary records and RXDD.
- Organized collection of data from clinical facilities (1,080 patient contacts from 28 sites) and pharmacies (90 purchase encounters from 40 pharmacies).
- Entry of clinical facility data into RXDD and production of tables and graphic reports.
- Separate analysis of pharmacies data and production of graphic reports.
- Generation of a list of specific "problems" or "points for refinement" that must be covered in order to the RXDD system suitable for worldwide use. These topics concern most of the points touched upon above, including sampling, enumerator training, data collection, data input, report generation and specific deficiencies in RXDD's current programming.

ENCLOSURE ONE

SUMMARY OF STUDY DESIGNS

1. PRESCRIBING PRACTICES IN MOH CLINICAL FACILITIES

- * Sample of sites included 15 CESARS (doctor staffed clinics), 11 CESAMOS (axillary staffed health posts) and 2 hospitals in the Metropolitan Region;
- * Sample of patient contacts was 24 contacts over a 12-month period for most sites; for the hospitals and larger CESAMOS, the samples were larger;
- * Sample of patient contacts drawn randomly from treatment registers, and spaced over the period of study based on the number of cases included at each site;
- * Data collected consists of patients name, age, and sex; type of care provider; diagnosis and diagnostic code; drug name, unit and number of units given.
- * Data collected by five enumerators familiar with diagnostic and pharmaceutical terminology; most of the enumerators were pharmacists; time for data collection was 7 days.

2. DRUG SALES FOR DIARRHOEA IN COMMERCIAL PHARMACIES

- * Sample of sites was 50 commercial pharmacies located in Tegucigalpa, selected randomly from the list of duty pharmacies, each of which was visited twice over a five-day period;
- * Nine enumerators were used, that is, "more affluent-appearing" male and female, and "less affluent-appearing" appearing males and females;
- * These enumerators posed as parents seeking help for a two year-old child with diarrhoea according to a defined scenario;
- * Data collected included the names and numbers of units of drugs sold plus other information on drug sellers' responses to requests for help with a child's diarrhoea;
- * This study analyzed 1) the types and costs of drugs sold; and 2) whether customers' appearance (male/female and more/less affluent) had any effect on drug sellers' responses.

ENCLOSURE TWO

SUMMARY OF EXPENSES FOR DATA COLLECTION

CAR RENTAL

* Rental fee for 2 cars for a total of 3 weeks @ \$200/week	\$600
* Drivers for 18 days @ \$7/day	\$126
* Gasoline averaging \$40/week per car for 3 weeks	\$120
Sub Total	\$846

CLINICAL FACILITY STUDY

* 5 Enumerators for 9 days each @ \$13/day	\$585
* Incidental expenses @ \$19/enumerator	\$ 95
Sub Total	\$680

PHARMACY STUDY

* 9 Enumerators for 1/2 training day each @ \$13/day	\$ 59
* 90 Pharmacy visits @ \$2.60/visit	\$234
* 90 drug purchases @ \$3.70/purchase	\$333
* Taxi fares for 9 enumerators @ \$19/enumerator	\$171
Sub Total	\$797
Total	\$2323

C. List of Metropolitan Region Health Facilities Included in the Prescribing Analysis Sample

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ESTABLECIMIENTOS EN LA MUESTRA DE PRUEBA DE RXDD
REGION SANITARIA METROPOLITANA

ESTABLECIMIENTO	TIPO
ALONSO SUAZO	CESAMO
VILLA ADELA	CESAMO
MONTERREY	CESAMO
PEDREGAL	CESAMO
FLOR DEL CAMPO	CESAMO
SAN BENITO	CESAMO
YAGUACIRE	CESAR
AGUACATE	CESAR
SANTA ELENA	CESAR
SAN JUAN RANCHO	CESAR
EL MANCHEN	CESAMO
SAN MIGUEL	CESAMO
EL BOSQUE	CESAMO
NUEVA SUYAPA	CESAMO
EL CHILE	CESAMO
RIO HONDO	CESAR
MONTE REDONDO	CESAR
JUTIAPA	CESAR
LAS CRUCITAS	CESAMO
SAN FRANCISCO	CESAMO
TRES DE MAYO	CESAMO
ALEMANIA	CESAMO
LA CUESTA	CESAR
DIVANNA	CESAR
SOROGUARA	CESAR
EL EDEN	CESAR
ESCUELA	HOSPITAL
SAN FELIPE	HOSPITAL

- D. Map of the Tegucigalpa-Comayaguella Area Showing Locations of the Health Facilities and Pharmacies Used in the Studies

E. Training Program for Enumerators Working on the Health
Facilities Study

TRAINING PROGRAM FOR CLINICAL STUDY DATA COLLECTORS

TOPIC	TRAINING AIDS	TIME REQUIRED
<p>1. Overview of the project:</p> <ul style="list-style-type: none"> * What RXDD is; * Ministry's interest in RXDD; * Role of the data collectors. 	RXDD Briefing Package	30 minutes
<p>2. Terms of employment:</p> <ul style="list-style-type: none"> * Work to be carried out; * Start and finish dates; * Days to work and compensation. 	Letter of Engagement	15 minutes
<p>3. Need for committment:</p> <ul style="list-style-type: none"> * Each data collector will visit about 7 clinics; * Need for punctuality and efficiency; * Importance of being available for entire data collection period. 	None	15 minutes
<p>4. How data is entered into RXDD:</p> <ul style="list-style-type: none"> * Show patient contact screen; * There are fields for location, provider, patient demographics, health problems and drugs; * Point out how the fields require coded data. 	RXDD	15 minutes
<p>5. The data collection form:</p> <ul style="list-style-type: none"> * Before data may be entered into RXDD, they must be organized in a standard manner; * The sections of the form correspond to the fields of RXDD's patient encounter screens; * The data collection form has space for both original names and codes; * The data collector's role is to locate in clinical records, information on patient demographics, diagnoses, and drug prescribed and enter it into the data collection form. 	Data Collection Form	15 minutes

TRAINING PROGRAM FOR CLINICAL STUDY DATA COLLECTORS

TOPIC	TRAINING AIDS	TIME REQUIRED
<p>6. Diagnostic codes and drug codes:</p> <ul style="list-style-type: none"> * The study focuses on diarrhoeal disease, so the list of diagnoses is relatively short; * The Ministry's drug list is long, but number of products prescribed for diarrhoea is also relatively short 	<p>List of Diagnoses for Diarrhoea</p> <p>Drug List</p>	15 minutes
<p>7. Practice session to enter data into data collection forms:</p> <ul style="list-style-type: none"> * The first 10 entries are problem free; * The second 10 entries illustrate various problems likely to be encountered. 	<p>Blank Data Collection Forms</p> <p>Sample Data for Entry</p>	60 minutes
<p>8. How to draw the sample of patient contacts:</p> <ul style="list-style-type: none"> * Listing sample cases & alternates 1st case each month; 2nd case half-way through month * Finding family folders in archive * Finding specific encounters in family folders 	<p>Check List for Drawing Patient Contact Sample</p>	60 minutes
<p>9. Important information:</p> <ul style="list-style-type: none"> * Individuals' schedules for clinic visits; * How to get started in a clinic; * Transportation arrangements; * Communications information in case of problems. 	<p>Schedules for Clinic Visits</p> <p>Letters of Introduction</p>	30 minutes

F. RxDH Honduras Field Test Health Problem Classification

HONDURAS R&DD LISTA DE ENFERMEDADES

CODIGO DE ENFERMEDAD	DESCRIPCION DE ENFERMEDAD	PARA AGRUPAR	CODIGO DE GRUPO
CLASE 1.00: INFECCIOSO Y PARASITARIO			
1.00	ENFERMEDAD DIARREICA	1	1.00
1.00	DIARREA CON/SIN DESHIDRATAACION	0	1.00
1.00	MALABSORCION INTESTINAL	0	1.00
1.00	SINDROME DIARREICA	0	1.00
1.01	COLERA	0	1.00
1.02	DESINTERIA BACILAR	0	1.00
1.03	AMEBIASIS, DESINTERIA	0	1.00
1.04	DIARREA AGUDA	0	1.00
1.04	ENTERITIS AGUDA	0	1.00
1.04	GASTRO-ENTERITIS	0	1.00
1.05	TIFOIDEA Y PARATIFOIDEA	0	1.00
1.06	ENVENAMIENTO POR COMIDA	0	1.00
1.06	INTOXICACION ALIMENTARIA	0	1.00
1.07	DIARREA, VIRAL OTRO/NO SPECIFICADO	0	1.00
1.08	DIARREA, BACTERIANA OTRO/NO SPECIF.	0	1.00
1.08	DISENTERIA, NO SPECIFICADO	0	1.00
1.08	SALMONELOSIS	0	1.00
1.10	ENFERMEDADES POR MICOBACTERIAS	0	1.00
1.11	TUBERCULOSIS PULMONAR	1	1.10
1.15	LEPRA	0	1.10
1.19	OTRA INFECC. POR MICOBACTERIA	0	1.10
1.20	ENFERMEDAD TRANSMISIBLE INFANT	0	1.10
1.21	VARICELA	1	1.20
1.22	SARAMPION	0	1.20
1.23	PERTUSIS	0	1.20
1.29	OTRA ENFERMED. INFECCIOSA INF.	0	1.20
1.30	MALARIA	0	1.20
1.40	ENFERMEDAD VENEREA	1	1.30
1.41	SIFILIS	1	1.40
1.42	GONORREA	0	1.40
1.43	OFTALMIA NEONATO	0	1.40
1.44	CHANCRO	0	1.40
1.49	OTRAS ENFERMEDADE VENEREAS	0	1.40
1.50	INFECCIONES DE HONGOS	0	1.40
1.51	INFECCIONES DE LA PIEL	1	1.50
1.52	CANDIDIASIS VAGINAL	0	1.50
1.59	OTRA INFECCION DE HONGOS	0	1.50
1.60	INFECCIONES HELMINTICAS	0	1.50
1.60	DIARREA PARASITARIA	1	1.60
1.60	PARASITISMO INTESTINAL	0	1.60
1.61	ESQUISTOSOMIASIS HAEMATOBIA	0	1.60
1.62	ESQUISTOSOMIASIS MANSONI	0	1.60
1.63	ESQUISTOSOMIASIS JAPONESA	0	1.60
1.64	SOLITARIA	0	1.60
1.65	ANCILOSTOMIASIS	0	1.60
1.66	ASCARIDIASIS	0	1.60
1.67	GIARDIASIS	0	1.60
1.69	LAMBLIASIS	0	1.60
1.69	OTRA INFECCION HELMINTICA	0	1.60
1.69	OXIUROS	0	1.60
1.69	TRICOCEFALOS	0	1.60

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CODIGO DE ENFERMEDAD	DESCRIPCION DE ENFERMEDAD	PARA AGRUPAR	CODIGO DE GRUPO
1.70	FILARIASIS	1	1.70
1.71	ONCOCERCOSIS	0	1.70
1.79	OTRA INFECCION PARASITARIA	0	1.70
1.80	INFECCION SUPERFICIAL	1	1.80
1.81	TRICOMONIASIS VAGINAL	0	1.80
1.82	PIOJOS	0	1.80
1.83	SARNA (ESCABIASIS)	0	1.80
1.90	OTRA INFECCION NO ESPECIFICADA	1	1.90

CLASE 2.00: ENDOCRINE, NUTRITIONAL, METABOLICO

2.10	DIABETES MELLITUS	1	2.10
2.20	DESNUTRICION	1	2.20
2.21	MARASMO	0	2.20
2.22	KWACHORKO	0	2.20
2.30	DEFICIENCIA DE VITAMINA	1	2.30
2.31	DEFICIENCIA DE VITAMINA A	0	2.30
2.39	OTRA DEFICIENCIA DE VITAMINA	0	2.30
2.40	SIDA	1	2.40
2.90	OTRO TRASTORNO ENDOCRINO	1	2.90

CLASE 4.00: SANGRE Y ORGANOS SANGUINES

4.10	ANEMIA, POR DEFICIENCIA HIERRO	1	4.10
4.20	DREPANOCITOSIS	1	4.20
4.90	OTRA ENFERMEDAD DE LA SANGRE	1	4.90

CLASE 5.00: DESORDINES MENTALES

5.10	PSICOSIS	1	5.10
5.20	NEUROSIS, ANSIEDAD	1	5.20
5.30	NEUROSIS DEPRESIVA	1	5.30
5.40	ALCOHOLISMO, SIDROMA ALCOHOL	1	5.40
5.90	OTRO TRASTORNO MENTAL	1	5.90

CLASE 6.00: SISTEMA NERVIOSO Y ORGANES SENSIT.

6.10	EPILEPSIA	1	6.10
6.20	INFECCION EN LOS OJOS	1	6.20
6.21	CONJUNTIVITIS	0	6.20
6.25	TRACOMA	0	6.20
6.29	OTRA INFECCION DEL OJO	0	6.20
6.30	OTITIS EXTERNA	1	6.30
6.40	OTITIS MEDIA	1	6.40
6.50	ENCEFALITIS, MENINGITIS	1	6.50
6.90	OTRO SN Y ORGANOS SENSORIALES	1	6.90

CLASE 7.00: SISTEMA CIRCULATORIO

7.10	ENFERMEDAD DEL CORAZON REUMAT.	1	7.10
7.20	HIPERTENSION	1	7.20
7.30	ENFERMEDAD DEL CORAZON	1	7.30
7.50	CONMOCION	1	7.50
7.51	CONMOCION ANAFILACTICA	0	7.50
7.60	EDEMA NO ESPECIFICADO	1	7.60
7.90	OTRA ENFERMEDAD SISTEMA CIRCUL	1	7.90

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CODIGO DE ENFERMEDAD	DESCRIPCION DE ENFERMEDAD	PARA AGRUPAR	CODIGO DE GRUPO
CLASE 8.00: SISTEMA RESPIRATORIO			
8.10	IRA	1	8.10
8.11	IRA, ALTA	0	8.10
8.12	IRA, BAJA	0	8.10
8.20	AMIGDALITIS	1	8.20
8.30	BROQUITIS AGUDA	1	8.30
8.40	BRONQUITIS CRONICA	1	8.40
8.50	NEUMONIA	1	8.50
8.50	BRONCONEUMONIA	0	8.50
8.60	ASMA	1	8.60
8.90	OTRAS ENFERMEDADES SIST.RESP.	1	8.90
CLASE 9.00: SISTEMA DIGESTIVO			
9.10	CARIES, DOLOR DE MUELAS	1	9.10
9.20	ABSCESO DENTAL	1	9.20
9.30	MALESTAR BUCAL	1	9.30
9.40	GASTRITIS, INDIGESTION	1	9.40
9.50	CONSTIPADO	1	9.50
9.60	HEMORROIDES	1	9.60
9.90	OTRA ENFERMED. SISTEMA DIGEST.	1	9.90
CLASE 10.00: SISTEMA GENITO-URINARIO			
10.10	CISTITIS	1	10.10
10.20	ENFERMEDAD INFLAMA. PELVICA	1	10.20
10.30	COLICO RENAL	1	10.30
10.90	OTRA ENFERMEDAD GENITOURINARIA	1	10.90
CLASE 11.00: COMPLICACIONES EMBAREZO Y NASCIMEN.			
11.10	ABORTO	1	11.10
11.20	PARTO NORMAL	1	11.20
11.30	ENTREGA ANORMAL	1	11.30
11.40	HEMORRAGIA POST-PARTO	1	11.40
11.50	INFECCION PUERPERAL	1	11.50
11.55	SEPSIS NEONATAL, OTRAS INFECCIONES	1	11.55
11.60	ABSCESO DEL PECHO, MASTITIS	1	11.60
11.90	OTRAS COMPLICACIONES DE EMBAR.	1	11.90
CLASE 12.00: PIEL Y TEJIDO SUECUTANEO			
12.10	ABSCESO	1	12.10
12.20	INFECCION BACTERIANA DE PIEL	1	12.20
12.30	ECZEMA	1	12.30
12.40	ALERGIA EN LA PIEL	1	12.40
12.50	PICAZON	1	12.50
12.60	ULCERA TROPICAL, ULCERA CRONIC	1	12.60
12.90	OTRAS ENFERMEDADES DE LA PIEL	1	12.90
CLASE 13.00: MUSCULOESQUELETICO Y TEJIDO CONECT.			
13.10	ARTRITIS Y ARTROSIS	1	13.10
13.20	LUMBAGO DE ESPALDA	1	13.20

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CODIGO DE ENFERMEDAD	DESCRIPCION DE ENFERMEDAD	PARA AGRUPAR	CODIGO DE GRUPO
13.30	PIOMIOCITIS	1	13.30
13.90	OTRA ENFERMEDAD MUSCULAR	1	13.90

CLASE 16.00: SIGNES Y SIMTOMES

16.10	CONVULSIONES, FIEBRE	1	16.10
16.20	INSOMNIO	1	16.20
16.30	FIEBRE	1	16.30
16.40	CANSANCIO	1	16.40
16.50	DOLOR DE CUERPO EN GENERAL	1	16.90
16.51	DOLOR DE CABEZA	1	16.50
16.60	TUS	1	16.60
16.70	VOMITOS	1	16.70
16.80	TENSION ABDOMINAL	1	16.80
16.81	DOLOR ABDOMINAL	0	16.80
16.82	ASCITIS	0	16.80
16.83	COLITIS	0	16.80
16.90	DESHIDRATAACION, NO SPECIFICADO	1	16.90
16.91	DESHIDRATAACION, LEVE O MODERADA	0	16.90
16.92	DESHIDRATAACION, SEVERA	0	16.90

CLASE 17.00: LESION Y ENVINENAMIENTO

17.10	FRACTURAS	1	17.10
17.20	DISLOCACION	1	17.20
17.30	TORCEDURA, ESGUINCE	1	17.30
17.40	CONMOCION CEREBRAL	1	17.40
17.50	HERIDAS Y LACERACIONES	1	17.50
17.51	HERIDA ABIERTA, LACERACION	0	17.50
17.52	MORETES, HERIDA MENOR	0	17.50
17.53	HERIDA COMPLICADA, MORDIDA ANIM	0	17.50
17.60	CUERPO EXTRANO EN LOS OJOS	1	17.60
17.70	QUEMADURA	1	17.70
17.80	ENVENENAMIENTO	1	17.80
17.85	MORDIDA DE CULEBRA, OTRA PICAD.	0	17.80
17.90	OTRA HERIDA O ENVENENAMIENTO	1	17.90

CLASE 18.00: VISITAS REPETIDAS, MISMO PROBLEMA

18.10	INYECCIONES	1	18.10
18.20	VENDAJES	1	18.20
18.30	MEDICACION ORAL	1	18.30
18.40	VISITA SUBSIGUIENTE	1	18.40
18.50	SUTURACION O VENDAJE DE HERIDA	1	18.50
18.90	CONSULTA Y SERVICIO SUBSIGUIEN	1	18.90

CLASE 19.00: CONTACTO CON OTRO SERVICIO DE SALUD

19.10	VACUNACION	1	19.10
19.20	CUIDADO PREVENTIVO, < 5 ANOS	1	19.20
19.30	CUIDADO PRENATAL	1	19.30
19.40	PLANIFICACION FAMILIAR	1	19.40
19.50	EXAMEN MEDICO SIN ENFERMEDAD	1	19.50

CODIGO DE ENFERMEDAD	DESCRIPCION DE ENFERMEDAD	PARA AGRUPAR	CODIGO DE GRUPO
CLASE 20.00: OTROS PROBLEMAS, NO ESPECIFICADO			
20.00	OTRO PROBLEMA NO ESPECIFICADO	1	20.00
CLASE 99.00: PROBLEMA DE SALUD DESCONOCIDO			
99.00	PROBL. DE SALUD DESCONOCIDO	1	99.00

REGISTROS IMPRESADOS: 173

G. RxDD Honduras Field Test Drug List

HONDURAS RxD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
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CLASE 10.00: ANALGESICOS: ANTIPIRETS. Y ANTIINFLAM.

1	100002	AC.ACETILSALICILICO:100 MG:TAB	ORAL	0
2	100003	AC.ACETILSALICILICO:500 MG:TAB	ORAL	0
3	100002G	AC.ACETILSALICILICO:CONTR.DESC.	ORAL	1
4	100000A	ACETAMINOFEN:24 MG/ML:120 ML FC	ORAL	0
5	100000	ACETAMINOFEN:24 MG/ML:60 ML FC	ORAL	0
6	100001	ACETAMINOFEN:500 MG:TAB	ORAL	0
7	100000G	ACETAMINOFEN:CONTR.Y FORM.DESC.	DESC	1
8	100004G	DEXAMETASONA INY:CONTR.DESC.	INY	1
9	100004	DEXAMETASONA:4 MG/ML:1 ML AMP	INY	0
10	100004A	DEXAMETASONA:4 MG/ML:2 ML AMP	INY	0
11	100005	DIPIRONA:1 GM/ML:2 ML AMP	INY	0
12	100005G	DIPIRONA:CONTR.DESC.	INY	1
13	100006G	FENILBUTAZONA TAB:CONTR.DESC.	ORAL	1
14	100006	FENILBUTAZONA:200 MG:TAB	ORAL	0
15	100011	HIDROCORT.INY:100 MG:1 AMP FC	INY	0
16	100012	HIDROCORT.INY:500 MG:1 AMP FC	INY	0
17	100011G	HIDROCORT.INY:CONTR.DESC.	INY	1
18	100008A	INDOCID:25 MG:CAP	ORAL	0
19	100008	INDOMETACINA:25 MG:CAP	ORAL	0
20	100008G	INDOMETACINA:CONTR.Y FORM.DESC.	DESC	1
21	100009G	NAPROXEN TAB:CONTR.DESC.	ORAL	1
22	100009	NAPROXEN:250 MG:TAB	ORAL	0
23	100013G	NONESTER.ANTIINFL.TAB:CONTR.DESC.	ORAL	1
24	100010G	PREDNISONA TAB:CONTR.DESC.	ORAL	1
25	100010	PREDNISONA:5 MG:TAB	ORAL	0
26	100013	TABALON 200 MG TAB	ORAL	0

CLASE 10.01: ANALGESICOS, NARCOTS. Y ANTAGONS.

27	100100	FENTANYL INY: ? MG/ML:10 ML FC	INY	0
28	100100G	FENTANYL INY:CONTR.DESC.	INY	1
29	100101G	MEPERIDINA INY:CONTR.DESC.	INY	1
30	100101	MEPERIDINA:50 MG/ML:1 AMP	INY	0
31	100102G	MORFINA (SULFATO) INY:CONTR.DESC.	INY	1
32	100102	MORFINA :2 MG/ML:1 ML AMP	INY	0
	100103	NALOXONA: MG/ML:1 ML AMP	INY	0
	100103A	NALOXONA: MG/ML:2 ML AMP	INY	0
33	100103G	NALOXONA:CONTR.DESC.	INY	1

CLASE 10.02: ANALGESICOS DE USO TOPICO

36	100200	ANTIPIR.+BENZ.+HIDROX.:15 ML FC	TOP	0
37	100200G	ANTIPIR.+BENZ.+HIDROX.:CONTR.DESC.	TOP	1
38	100201	SALICILATO DE METILO:5 %: GM	TOP	0
39	100201G	SALICILATO DE METILO:CONTR.DESC.	TOP	1

CLASE 10.03: ANTIACIDOS Y ANTIULCEROSOS

40	100301G	CIMETIDINA INY:CONTR.DESC.	INY	0
41	100301	CIMETIDINA:150 MG/ML:2 ML AMP	INY	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPA
42	100300	CIMETIDINA:300 MG: GG	ORAL	0
43	100300G	CIMETIDINA:CONTR.Y FORM.DESC.	DESC	1
44	100302G	HIDRO.AL.Y MAGN.+DIMET.:CONTR.DESC.	ORAL	1
45	100302	HIDRO.ALUM.Y MAGN.+DIMETILPOL.: ML	ORAL	0
46	100303	PEPTO BISMOL:30 ML FC	ORAL	0
47	100303G	PEPTO BISMOL:CONTR.DESC.	ORAL	1
48	100304G	RANITIDINA INY:CONTR.DESC.	INY	1

CLASE 10.04: ANTIARRITMICOS

49	100400	AMIODARONA:200 MG:TAB	ORAL	0
50	100400G	AMIODARONA:CONTR.DESC.	ORAL	1
51	100401	PROPRANOLOL:10 MG:TAB	ORAL	0
52	100402	PROPRANOLOL:40 MG:TAB	ORAL	0
53	100401G	PROPRANOLOL:CONTR.DESC.	ORAL	1
54	100404	VERAPAMIL INY:2.5 MG/ML:2 ML AMP	INY	0
55	100404G	VERAPAMIL INY:CONTR.DESC.	INY	0
56	100403	VERAPAMIL:80 MG: GG	ORAL	0
57	100403G	VERAPAMIL:CONTR.Y FORM.DESC.	DESC	1

CLASE 10.05: ANTIBACTERIANOS

58	100527D	ALFA-PRIM: 120ML: FC	ORAL	0
59	100501	AMIKACINA INY:250 MG/ML:2 ML AMP	INY	0
60	100500	AMIKACINA INY:50 MG/ML:2 ML AMP	INY	0
61	100500G	AMIKACINA INY:CONTR.DESC.	INY	1
62	100506	AMPICILINA INY:1 GM AMP	INY	0
63	100505	AMPICILINA INY:250 MG AMP	INY	0
64	100505G	AMPICILINA INY:CONTR.DESC.	INY	0
65	100502	AMPICILINA SU.ORAL:50 MG/ML:60ML FC	ORAL	0
66	100502G	AMPICILINA SUSP.ORAL:CONTR.DESC.	ORAL	1
67	100503	AMPICILINA:250 MG:CAP	ORAL	0
68	100504	AMPICILINA:500 MG:CAP	ORAL	0
69	100503G	AMPICILINA:CONTR.Y FORM.DESC.	DESC	1
70	100527E	ANDIPRIN: 120ML: FC	ORAL	0
71	100508G	CEFALOSPOR.INY:CONTR.DESC.	INY	1
72	100508	CEFALOSPOR.TERCERA GEN.INY:1 GM FC	INY	0
73	100509	CEFOXITINA INY:1 GM FC	INY	0
74	100509G	CEFOXITINA INY:CONTR.DESC.	INY	1
75	100531G	CLINDAMICINA :CONTR.DESC.	INY	1
76	100531	CLINDAMICINA:150 MG/ML:2 ML AMP	INY	0
77	100531A	CLINDAMICINA:150 MG/ML:4 ML AMP	INY	0
78	100510	CLORANFEN.SUS.OR.:25 MG/ML:60ML FC	ORAL	0
79	100511G	CLORANFENICOL CAP:CONTR.DESC.	ORAL	0
80	100512	CLORANFENICOL INY:1 GM	INY	0
81	100512G	CLORANFENICOL INY:CONTR.DESC.	INY	0
82	100511	CLORANFENICOL:250 MG:CAP	ORAL	0
83	100510G	CLORANFENICOL:CONTR.Y FORM.DESC.	DESC	1
84	100514G	DICLOXACILINA CAP:CONTR.DESC.	ORAL	0
85	100513	DICLOXACILINA S.O.:13MG/ML:60 ML FC	ORAL	0
86	100514	DICLOXACILINA:250 MG:CAP	ORAL	0
87	100513G	DICLOXACILINA:CONTR.Y FORM.DESC.	DESC	1
88	100534G	DICLOXACILINA:CONTR.Y FORM.DESC.	DESC	1

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
89	100516	ERITROMICINA S.ORL.:40MG/ML:60ML FC	ORAL	0
90	100517G	ERITROMICINA TAB:CONTR.DESC.	ORAL	0
91	100517	ERITROMICINA: 500 MG:TAB	ORAL	0
92	100516G	ERITROMICINA:CONTR.Y FORM.DESC.	DESC	1
93	100518G	GENTAMICINA INY:CONTR.DESC.	INY	1
94	100518	GENTAMICINA:20 MG/ML:2 ML AMP	INY	0
95	100518A	GENTAMICINA:30 MG/ML:2 ML AMP	INY	0
96	100519	GENTAMICINA:40 MG/ML:2 ML AMP	INY	0
97	100527F	LIDAPRIM: 50ML: FC	ORAL	0
98	100535G	MEFOXIN:CONTR.Y FORM.DESC.	DESC	1
99	100532	METICILINA INY:1 GM FC	INY	0
100	100532G	METICILINA INY:CONTR.DESC.	INY	1
101	100520G	NITROFURANTOINA TAB:CONTR.DESC.	ORAL	1
102	100520	NITROFURANTOINA:50 MG:CAP	ORAL	0
103	100533	OXACILINA 130 MG TAB	ORAL	0
104	100533G	OXACILINA TAB:CONTR.DESC.	ORAL	1
105	100516A	PANTOMICINA:CONTR.Y FORM.DESC.	DESC	0
106	100521	PENIC.CRIST.INY:1,000,000U AMP FC	INY	0
107	100522	PENIC.CRIST.INY:10,000,000U AMP FC	INY	0
108	100524G	PENICILINA BENZATIN.INY:CONTR.DESC.	INY	1
109	100524	PENICILINA BENZATINICA INY:1 AMP FC	INY	0
110	100521G	PENICILINA CRISTAL.INY:CONTR.DESC.	INY	1
111	100523G	PENICILINA PROCAIN.INY:CONTR.DESC.	INY	1
112	100523	PENICILINA PROCAINICA INY: 1 AMP FC	INY	0
113	100530	PIPERACILINA INY:2 GM:1 AMP FC	INY	0
114	100530G	PIPERACILINA INY:CONTR.DESC.	INY	1
115	100527C	SULBRON SOL.OR.:CONTR.DESC.	ORAL	0
116	100528A	SULMEPRIM TAB:CONTR.DESC.	ORAL	1
117	100527B	SULMEPRIM: 60ML: FC	ORAL	0
118	100525G	TETRACICLINA CAP:CONTR.DESC.	ORAL	1
119	100525	TETRACICLINA:250 MG:CAP	ORAL	0
120	100526	TETRACICLINA:500 MG:CAP	ORAL	0
121	100529G	TRIMET.+SULFAMETOX.INY:CONTR.DESC.	INY	0
122	100527G	TRIMETO+SULFAMET:CONTR.Y FORM.DESC.	ORAL	1
123	100529	TRIMETO.+SULFAMETOX.:3 ML AMP	INY	0
124	100528	TRIMETO.+SULFAMETOX.:80+400 MG:TAB	ORAL	0
125	100527A	TRIMETO.+SULFAMETOX.SOL.O.:100ML FC	ORAL	0
126	100527	TRIMETO.+SULFAMETOX.SOL.O.:50ML FC	ORAL	0
127	100528G	TRIMETO.+SULFAMETOX.TAB:CONTR.DESC.	ORAL	0

CLASE 10.06: ANTIBACTERIANOS LOCALES

128	100600G	BACIT+NEOM+POL.UNG.OFT.:CONTR.DESC.	OFT	1
129	100600	BACIT+NEOMIC+POLIM.UNG.OFT:4GM TUBO	OFT	0
130	100600A	BACIT+NEOMIC+POLIM.UNG.OFT:5GM TUBO	OFT	0
131	100606G	CLORANFENICOL GOT.OFT.:CONTR.DESC.	OFT	1
132	100601A	GENTAMICINA GOT.OFT.:3MG/ML:15ML FC	OFT	0
133	100601	GENTAMICINA GOT.OFT.:3MG/ML:5ML FC	OFT	0
134	100601G	GENTAMICINA GOT.OFT.:CONTR.DESC.	OFT	1
135	100607G	OXITET.+POLIM.UNG.OFT.:CONTR.DESC.	OFT	1
136	100602G	OXITET.CLORHIDR.UN.OFT.:CONTR.DESC.	OFT	1
137	100602	OXITET.CLORHIDR.UNG.OFT.:5GM TUBO	OFT	0
138	100603G	POLIM+NEO+ESTER.UNG.OF.:CONTR.DESC.	DESC	1

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPA.
139	100604G	POLIM+NEO+HIDRO.GOT.OT.:CONTR.DESC.	OTIC	1
140	100603	POLIM+NEOMIC+ESTER.UNG.OFT:4GM TUBO	OFT	0
141	100603A	POLIM+NEOMIC+ESTER.UNG.OFT:5GM TUBO	OFT	0
142	100604A	POLIM+NEOMIC+HIDROC.GOT.OTI:10GM FC	OTIC	0
143	100604	POLIM+NEOMIC+HIDROC.GOT.OTI:5GM FC	OTIC	0
144	100605	SULFADIAZINA DE PLATA:400 GM TUBO	TOP	0
145	100605G	SULFADIAZINA DE PLATA:CONTR.DESC.	TOP	1
146	100607	TERRAMYCIN UNG.OFT.:5 GM TUBO	OFT	0
147	100608G	WHITFIELD UNG.TOPIC.:CONTR.DESC.	TOP	1

CLASE 10.07: ANTICOAGULANTES Y SUS ANTAGONIST

148	100700G	HEPARINA SODICA INY:CONTR.DESC.	INY	1
149	100700	HEPARINA SODICA:5,000 U/ML:5 ML AMP	INY	0
150	100701G	PROTAMINA (SULFATO DE):CONTR.DESC.	INY	1
151	100701	PROTAMINA :10 MG/ML:5 ML AMP	INY	0
152	100702G	WARFARINA SODICA TAB:CONTR.DESC.	ORAL	1
153	100702	WARFARINA SODICA:5 MG:TAB	ORAL	0

CLASE 10.08: ANTICONVULSIVANTES

154	100800G	CARBAMAZEPINA TAB:CONTR.DESC.	ORAL	1
155	100800	CARBAMAZEPINA:200 MG:TAB	ORAL	0
156	100801G	DIAZEPAM INY:CONTR.DESC.	INY	1
157	100801	DIAZEPAM:10 MG:2 ML AMP	INY	0
158	100802G	ETOSUXIMIDA CAP:CONTR.DESC.	ORAL	1
159	100802	ETOSUXIMIDA:250 MG:CAP	ORAL	0
160	100805G	FENITOINA CAP:CONTR.DESC.	ORAL	0
161	100804G	FENITOINA INY:CONTR.DESC.	INY	0
162	100803	FENITOINA SUSP.OR:25 MG/ML:120ML FC	ORAL	0
163	100805	FENITOINA:100 MG:CAP	ORAL	0
164	100804	FENITOINA:50 MG/ML:5 ML AMP	INY	0
165	100803G	FENITOINA:CONTR.Y FORM.DESC.	DESC	1
166	100806G	FENOBARBITAL TAB:CONTR.DESC.	ORAL	1
167	100807	FENOBARBITAL:100 MG:TAB	ORAL	0
168	100806	FENOBARBITAL:32 MG:TAB	ORAL	0
169	100808G	PRIMIDONA TAB:CONTR.DESC.	ORAL	1
170	100808	PRIMIDONA:250 MG:TAB	ORAL	0
171	100809	SULFATO DE MAGNESIO:10 %:10 ML AMP	INY	0
172	100809G	SULFATO DE MAGNESIO:CONTR.DESC.	INY	1

CLASE 10.09: ANTIEMETICOS

173	100903G	BONODOXINA GOT.:CONTR.DESC.	ORAL	1
174	100904G	DIMENHIDRANATA INY:CONTR.DESC.	INY	0
175	100905G	DIMENHIDRANATA:CONTR.Y FORM.DESC.	DESC	1
176	100905A	DRAMAMINE:CONTR.Y FORM.DESC.	DESC	0
177	100902	MECLIZINA GOT.PED.:30 ML FC	ORAL	0
178	100902G	MECLIZINA GOT.PED.:CONTR.DESC.	ORAL	1
179	100901G	METOCLOPRAMIDA INY:CONTR.DESC.	INY	0
180	100900	METOCLOPRAMIDA:10 MG:TAB	ORAL	0
181	100901	METOCLOPRAMIDA:5 MG/ML:5 MG AMP	INY	0
182	100900G	METOCLOPRAMIDA:CONTR.Y FORM.DESC.	DESC	1

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HONDURAS RxD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
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CLASE 10.10: ANTIESPASMODICOS

183	101000G	ANTIESPAS.+ANALG.ADULTO:CONTR.DESC.	ORAL	1
184	101000	ANTIESPASM.+ANALG.ADULTO:TAB	ORAL	0
185	101002	ANTIESPASM.+ANALG.INY:1 AMP	INY	0
186	101002G	ANTIESPASM.+ANALG.INY:CONTR.DESC.	INY	1
187	101001	ANTIESPASM.INFANT.:0.5 MG/ML:ML	ORAL	0
188	101001G	ANTIESPASM.INFANT.:CONTR.DESC.	ORAL	1
189	101003	ATROPINA SULFATO INY:1 MG:1 AMP	INY	0
190	101003G	ATROPINA SULFATO INY:CONTR.DESC.	INY	1

CLASE 10.11: ANTIHELMINTICOS

191	101106G	ALBENDAZOL SOL.OR.:CONTR.DESC.	ORAL	1
192	101105	ALBENDAZOLE 100 MG TAB	ORAL	0
193	101105G	ALBENDAZOLE TAB:CONTR.DESC.	ORAL	1
194	101101B	HELI-6: 6TAB: CJ	ORAL	0
195	101106	HELI2: 20ML: FC	ORAL	0
196	101100A	HELMES SUSP OR:CONTR.DESC.	ORAL	0
197	101101A	HELMES TAB:CONTR.DESC.	ORAL	0
198	101100	MEBENDAZOLE S.ORAL:30 ML FC	ORAL	0
199	101100G	MEBENDAZOLE SUSP OR:CONTR.DESC.	ORAL	1
200	101101G	MEBENDAZOLE TAB:CONTR.DESC.	ORAL	1
201	101101	MEBENDAZOLE:100 MG:TAB	ORAL	0
202	101102G	NICLOSAMIDA TAB:CONTR.DESC.	ORAL	1
203	101102	NICLOSAMIDA:500 MG:TAB	ORAL	0
204	101103A	OXIURIL:CONTR.Y FORM.DESC.	ORAL	0
205	101103G	PIPERAZINA CITR.:CONTR.Y FORM.DESC.	ORAL	1
206	101103	PIPERAZINA CITRATO:100 MG/ML: ML	ORAL	0
207	101104G	PRAZICUANTEL TAB:CONTR.DESC.	ORAL	1
208	101104	PRAZICUANTEL:500 MG:TAB	ORAL	0
209	101102A	YOMESAN:500 MG:TAB	ORAL	0

CLASE 10.12: ANTIHIPERTENSIVOS

210	101200G	ALFAMETILDOPA TAB:CONTR.DESC.	ORAL	1
211	101200	ALFAMETILDOPA:250 MG:TAB	ORAL	0
212	101201	ALFAMETILDOPA:500 MG:TAB	ORAL	0
213	101202G	DIAZOXIDO INY:CONTR.DESC.	INY	1
214	101202	DIAZOXIDO:15 MG/ML:20 ML AMP	INY	0
215	101205	HIDRALAZINA INY:20 MG/ML:1 AMP	INY	0
216	101205G	HIDPALAZINA INY:CONTR.DESC.	INY	0
217	101203	HIDRALAZINA:10 MG:TAB	ORAL	0
218	101204	HIDRALAZINA:50 MG:TAB	ORAL	0
219	101203G	HIDRALAZINA:CONTR.Y FORM.DESC.	DESC	1
220	101206	NIFEDIPINA (CAP.GEL.):10 MG:CAP	ORAL	0
221	101206G	NIFEDIPINA (CAP.GEL.):CONTR.DESC.	ORAL	1

CLASE 10.13: ANTIHISTAMINICOS

222	101300A	ALERGIL:CONTR.Y FORM.DESC.	DESC	1
223	101302G	DIFENHIDRAMINA CAP:CONTR.DESC.	ORAL	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUP
224	101301	DIFENHIDRAMINA INY:10 MG/ML:10ML FC	INY	0
225	101301G	DIFENHIDRAMINA INY:CONTR.DESC.	INY	0
226	101300	DIFENHIDRAMINA:3 MG/ML: ML	ORAL	0
227	101302	DIFENHIDRAMINA:50 MG:CAP	ORAL	0
228	101300G	DIFENHIDRAMINA:CONTR.Y FORM.DESC.	DESC	1
229	101303G	PROMETAZINA INY:CONTR.DESC.	INY	1
230	101303	PROMETAZINA:25 MG/ML:2 ML AMP	INY	0

CLASE 10.14: ANTIINFLAMATORIOS DE USO TOPICO

231	101402	ANEST.+CORTIC.ANTIHEMORR.:10GM TUBO	RECT	0
232	101402A	ANEST.+CORTIC.ANTIHEMORR.:15GM TUBO	RECT	0
233	101402G	ANEST.+CORTIC.ANTIHEMR.:CONTR.DESC.	RECT	1
234	101400	ESTEROIDE DE USO TOPICO:10 GM TUBO	TOP	0
235	101400A	ESTEROIDE DE USO TOPICO:30 GM TUBO	TOP	0
236	101400G	ESTEROIDE DE USO TOPICO:CONTR.DESC.	TOP	1
237	101401G	HIDROC.+NEOM.+POLIM.CR.:CONTR.DESC.	TOP	1
238	101401	HIDROCORT.+NEOMIC.+POLIM.:10GM TUBO	TOP	0
239	101401A	HIDROCORT.+NEOMIC.+POLIM.:15GM TUBO	TOP	0
240	101400B	ZOTINAR CR.:CONTR.DESC.	TOP	1

CLASE 10.15: ANTILEPROSOS

241	101500G	CLOFAZIMINA CAP:CONTR.DESC.	ORAL	1
242	101500	CLOFAZIMINA:50 MG:CAP	ORAL	0
243	101501G	DAPSONE TAB:CONTR.DESC.	ORAL	1
244	101502	DAPSONE:100 MG:TAB	ORAL	0
245	101501	DAPSONE:25 MG:TAB	ORAL	0

CLASE 10.16: ANTIMICOTICOS SISTEMICOS

246	101600	ANFOTERICINA B INY:50 MG FC	INY	0
247	101600G	ANFOTERICINA B INY:CONTR.DESC.	INY	1
248	101601	GRISEOFULV.S.ORAL:25MG/ML:120ML FC	ORAL	0
249	101602G	GRISEOFULVINA TAB:CONTR.DESC.	ORAL	0
250	101602	GRISEOFULVINA:500 MG:TAB	ORAL	0
251	101601G	GRISEOFULVINA:CONTR.Y FORM.DESC.	DESC	1
252	101603G	KETOCONAZOL TAB:CONTR.DESC.	ORAL	1
253	101603	KETOCONAZOL:200 MG:TAB	ORAL	0
254	101603A	NIZORAL:200 MG:TAB	ORAL	0

CLASE 10.17: ANTIMICOTICOS DE ACCION LOCAL

255	101700G	AC.BENZOICO+AC.SALICIL.:CONTR.DESC.	TOP	1
256	101700	AC.BENZOICO+SALICILICO:1 GM BD	TOP	0
257	101701	CLOTRIMAZOLE: 10 GM TUBO	TOP	0
258	101701A	CLOTRIMAZOLE: 20 GM TUBO	TOP	0
259	101701G	CLOTRIMAZOLE:CONTR.DESC.	TOP	1
260	101703	NISTATINA SUSP.ORAL:20 ML FC	ORAL	0
261	101703A	NISTATINA SUSP.ORAL:30 ML FC	ORAL	0
262	101703G	NISTATINA SUSP.ORAL:CONTR.DESC.	ORAL	0
263	101704G	NISTATINA UNG.OFT.:CONTR.DESC.	OFT	1
264	101702	NISTATINA:100000 U:0 OV	VAG	0

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HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID. DESC	PARA AGRUPAR
265	101702G	NISTATINA:CONTR.Y FORM.DESC.	DESC	1

CLASE 10.18: ANTIPARKINSONIANOS

266	101801G	BIPERIDENO INY:CONTR.DESC.	INY	0
267	101800	BIPERIDENO:2 MG:TAB	ORAL	0
268	101801	BIPERIDENO:5 MG:1 AMP	INY	0
269	101800G	BIPERIDENO:CONTR.Y FORM.DESC.	DESC	1
270	101802G	LEVODOPA/ CARBIDOPA TAB:CONTR.DESC.	ORAL	1
271	101802	LEVODOPA/ CARBIDOPA:250+25MG:TAB	ORAL	0
272	101803G	TRIHEXIFENIDIL TAB:CONTR.DESC.	TAB	1
273	101803	TRIHEXIFENIDIL:2 MG:TAB	ORAL	0
274	101804	TRIHEXIFENIDIL:5 MG:TAB	ORAL	0

CLASE 10.19: ANTIPROTOZOARIOS

275	101903B	AMAGYL: 120ML: FC	ORAL	0
276	101903C	CICLOMEB: 120ML: FC	ORAL	0
277	101901	CLORHIDRATO DE EMETINA:60 MG:1 AMP	INY	0
278	101901G	CLORHIDRATO EMETINA INY:CONTR.DESC.	INY	1
279	101900G	CLOROQUINA TAB:CONTR.DESC.	ORAL	1
280	101900	CLOROQUINA:250 MG:TAB	ORAL	0
281	101903A	FLAGYL: 120ML: FC	ORAL	0
282	101909G	HIDROXICLOROQUINA TAB:CONTR.DESC.	ORAL	1
283	101909	HIDROXICLOROQUINA:200 MG:TAB	ORAL	0
284	101902	MEGLUMINA (ANTIMONIATO DE): 5ML AMP	INY	0
285	101902G	MEGLUMINA(ANTIMONI.) INY:CONTR.DESC.	INY	1
286	101908	METRONIDAZOL I.V.:100 ML FC	IV	0
287	101908G	METRONIDAZOL I.V.:CONTR.DESC.	IV	0
288	101905G	METRONIDAZOL OVUL.SUP.:CONTR.DESC.	VAG	0
289	101903	METRONIDAZOL SOL.OR.:120 ML FC	ORAL	0
290	101904G	METRONIDAZOL TAB:CONTR.DESC.	ORAL	0
291	101904	METRONIDAZOL:250 MG:TAB	ORAL	0
292	101905	METRONIDAZOL:500 MG: OVUL.SUP. (OV)	VAG	0
293	101903G	METRONIDAZOL:CONTR.Y FORM.DESC.	DESC	1
294	101906G	PRIMAQUINA BASE TAB:CONTR.DESC.	ORAL	1
295	101907	PRIMAQUINA BASE:15 MG:TAB	ORAL	0
296	101906	PRIMAQUINA BASE:5 MG:TAB	ORAL	0

CLASE 10.20: ANTITUBERCULOSOS

297	102000	ESTREPTOMICINA INY:1 GM FC	INY	0
298	102000G	ESTREPTOMICINA INY:CONTR.DESC.	INY	1
299	102001G	ETAMBUTOL TAB:CONTR.DESC.	ORAL	1
300	102001	ETAMBUTOL:200 MG:TAB	ORAL	0
301	102002	ETAMBUTOL:400 MG:TAB	ORAL	0
302	102003G	ISONIAZIDA TAB:CONTR.DESC.	ORAL	1
303	102004	ISONIAZIDA+TIACET.:300+150 MG:TAB	ORAL	0
304	102004G	ISONIAZIDA+TIACETAZ. TAB:CONTR.DESC.	ORAL	1
305	102003	ISONIAZIDA:100 MG:TAB	ORAL	0
306	102005G	PIRAZINAMIDA TAB:CONTR.DESC.	ORAL	1
307	102005	PIRAZINAMIDA:500 MG:TAB	ORAL	0
308	102006G	RIFAMPICINA TAB:CONTR.DESC.	ORAL	1

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HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPA
309	102007G	RIFAMPICINA+ISONIAC.TAB:CONTR.DESC.	ORAL	1
310	102007	RIFAMPICINA+ISONIACIDA:44 MG:TAB	ORAL	0
311	102006	RIFAMPICINA:300 MG:TAB	ORAL	0

CLASE 10.21: ASTRINGENTES

312	102100G	AC.ALUM+ACETICO SOL.OT.:CONTR.DESC.	OTIC	1
313	102100	AC.ALUM.+ACETICO SOL.OTIC.:60 ML FC	OTIC	0
314	102101	CALAMINA FENOLADA: 120 ML FC	TOP	0
315	102101A	CALAMINA FENOLADA: 500 ML FC	TOP	0
316	102101G	CALAMINA FENOLADA:CONTR.DESC.	TOP	1

CLASE 10.22: BRONCODILATADORES

317	102200A	AMINOFILINA:25 MG/ML:10 ML AMP	INY	0
318	102200	AMINOFILINA:25 MG/ML:5 ML AMP	INY	0
319	102200G	AMINOFILINA:CONTR.DESC.	INY	1
320	102206G	BRONDECON:CONTR.Y FORM.DESC.	ORAL	1
321	102202G	SALBUTAMOL SOL.:CONTR.DESC.	ORAL	0
322	102205	SALBUTAMOL SOL.PARA RESPIR:20 ML FC	INH	0
323	102205G	SALBUTAMOL SOL.RESPIR.:CONTR.DESC.	INH	0
324	102201	SALBUTAMOL:4 MG:TAB	ORAL	0
325	102201G	SALBUTAMOL:CONTR.Y FORM.DESC.	ORAL	1
326	102202	SALBUTAMOL:MG/ML:120 ML FC	ORAL	0
327	102202A	SALBUTAMOL:MG/ML:150 ML FC	ORAL	0
328	102204G	TEOFILINA (SOL.ORAL):CONTR.DESC.	ORAL	0
329	102204	TEOFILINA SOL.ORAL:5 MG/ML:120ML FC	ORAL	0
330	102203	TEOFILINA:250 MG:TAB	ORAL	0
331	102203G	TEOFILINA:CONTR.Y FORM.DESC.	ORAL	1

CLASE 10.23: DIURETICOS

332	102300G	ESPIRONOLACTONA TAB:CONTR.DESC.	ORAL	1
333	102300	ESPIRONOLACTONA:25 MG:TAB	ORAL	0
334	102302G	FUROSEMIDA TAB:CONTR.DESC.	ORAL	0
335	102301	FUROSEMIDA:10 MG/ML:2 ML AMP	INY	0
336	102302	FUROSEMIDA:40 MG:TAB	ORAL	0
337	102301G	FUROSEMIDA:CONTR.Y FORM.DESC.	DESC	1
338	102304G	HIDROCLOROT.+TRIAN.TAB:CONTR.DESC.	ORAL	1
339	102304	HIDROCLOROTIAZ.+TRIAN.T.:25+50MG:TAB	ORAL	0
340	102303G	HIDROCLOROTIAZIDA TAB:CONTR.DESC.	ORAL	1
341	102303	HIDROCLOROTIAZIDA:50 MG:TAB	ORAL	0

CLASE 10.24: ESCABICIDAS Y PEDICULICIDAS

342	102400A	GAMMA HEX.BENCENO LOCION:120 MG FC	TOP	0
343	102400	GAMMA HEX.BENCENO LOCION:60 MG FC	TOP	0
344	102400G	GAMMA HEXACL.BENCENO LO:CONTR.DESC.	TOP	1

CLASE 10.25: ESTIMULANTES DEL S.N.C.

345	102500G	METILFENID.CLORHIDR.CAP:CONTR.DESC.	ORAL	1
346	102500	METILFENIDATO CLORHIDRATO:2 MG:CAP	ORAL	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
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CLASE 10.26: ESTROGENOS Y ANTAGONISTAS

347	102600G	CLOMIFENO CITRATO TAB:CONTR.DESC.	ORAL	1
348	102600	CLOMIFENO CITRATO:50 MG:TAB	ORAL	0
349	102603G	ESTROG.CR.VAG.DIENESTR.:CONTR.DESC	VAG	1
350	102603	ESTROG.CR.VAG.DIENESTROL:30GM TUBO	VAG	0
351	102603A	ESTROG.CR.VAG.DIENESTROL:60GM TUBO	VAG	0
352	102604G	ESTROGENOS CONJUG. TAB:CONTR.DESC.	ORAL	1
353	102604	ESTROGENOS CONJUGADOS:1 MG:TAB	ORAL	0

CLASE 10.27: EXPECTORANTES

354	102702G	BISOLVON SOL.OR.:CONTR.DESC.	ORAL	1
355	102701	EXPECTORANTE ADULTO: ML	ORAL	0
356	102701G	EXPECTORANTE ADULTO:CONTR.DESC.	ORAL	1
357	102700	EXPECTORANTE INFANTIL: ML	ORAL	0
358	102700G	EXPECTORANTE INFANTIL:CONTR.DESC.	ORAL	1

CLASE 10.28: GLUCOSIDOS CARDIACOS

359	102800	DIGOXINA GOT.ELIX.:? MG/ML:10 ML FC	ORAL	0
360	102800A	DIGOXINA GOT.ELIX.:? MG/ML:60 ML FC	ORAL	0
361	102802G	DIGOXINA INY:CONTR.DESC.	INY	0
362	102801G	DIGOXINA TAB:CONTR.DESC.	ORAL	0
363	102802	DIGOXINA:? MG/ML:1 ML AMP	INY	0
364	102802A	DIGOXINA:? MG/ML:2 ML AMP	INY	0
365	102801	DIGOXINA:? MG:TAB	ORAL	0
366	102800G	DIGOXINA:CONTR.Y FORM.DESC.	ORAL	1

CLASE 10.29: HIPNOTICOS Y SEDANTES

367	102900G	BROMAZEPAN TAB:CONTR.DESC.	ORAL	1
368	102900	BROMAZEPAN:3 MG:TAB	ORAL	0
369	102902	CLORDIAZEPOXIDO INY:100 MG:1 AMP	INY	0
370	102902G	CLORDIAZEPOXIDO INY:CONTR.DESC.	INY	0
371	102901	CLORDIAZEPOXIDO:25 MG: GG	ORAL	0
372	102901G	CLORDIAZEPOXIDO:CONTR.Y FORM.DESC.	DESC	1
373	102903G	DIAZEPAN TAB:CONTR.DESC.	ORAL	1
374	102903	DIAZEPAN:10 MG:TAB	ORAL	0
375	102904	HIDRATO CLORAL S.O.:50MG/ML:10ML FC	ORAL	0
376	102904G	HIDRATO DE CLORAL S.O.:CONTR.DESC.	ORAL	1

CLASE 10.30: HIPOGLICEMIANTES

377	103000G	GLIBENCLAMIDA TAB:CONTR.DESC.	ORAL	1
378	103000	GLIBENCLAMIDA:5 MG:TAB	ORAL	0
379	103001	INSUL. CRISTALINA:40+80U/ML:10ML FC	INY	0
380	103001G	INSULINA INY:CONTR.DESC.	INY	1
381	103002	INSULINA NPH:80 U/ML:10 ML FC	INY	0

HONDURAS RxD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
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CLASE 10.31: LAXANTES Y CATARTICOS

382	103102A	ACEITE DE RICINO:120 ML FC	ORAL	0
383	103102	ACEITE DE RICINO:60 ML FC	ORAL	0
384	103102G	ACEITE DE RICINO:CONTR.DESC.	ORAL	1
385	103100	BISACODIL (CON CUB. ENTER.):5 MG:TAB	ORAL	0
386	103100G	BISACODIL TAB:CONTR.DESC.	ORAL	1
387	103101	ENEMA EVACUANTE: 1 FC	RECT	0
388	103101G	ENEMA EVACUANTE:CONTR.DESC.	RECT	1

CLASE 10.32: LUBRICANTES

389	103202	JALEA LUBRICANTE: GM:140 GM TUBO	TOP	0
390	103202G	JALEA LUBRICANTE:CONTR.DESC.	TOP	1
391	103200	PETROLATO LIQUIDO: ML	TOP	0
392	103200G	PETROLATO LIQUIDO:CONTR.DESC.	TOP	1
393	103201	PETROLATO SOLIDO: GM	TOP	0
394	103201G	PETROLATO SOLIDO:CONTR.DESC.	TOP	1

CLASE 10.33: OXITOCICOS

395	103301	MALEATO DE ERGOBASINA:? MG/ML:1 AMP	INY	0
396	103300	MALEATO DE ERGOBASINA:? MG:TAB	ORAL	0
397	103300G	MALEATO ERGOBAS.:CONTR.Y FORM.DESC.	DESC	1
398	103301G	MALEATO ERGOBASINA INY:CONTR.DESC.	INY	0
399	103302G	OXITOCINA INY:CONTR.DESC.	INY	1
400	103302	OXITOCINA:1 UI/ML:2 ML AMP	INY	0
401	103303	OXITOCINA:5 UI/ML:1 ML AMP	INY	0

CLASE 10.34: PROGESTAGENOS

402	103400	ACETATO DE MEDROXIPROGEST.:5 MG:TAB	ORAL	0
403	103400G	ACETATO MEDROXIPROG.TAB:CONTR.DESC.	ORAL	1
404	103401G	CAPRO.HIDROXIPROG.INY:CONTR.DESC.	INY	1
405	103401	CAPRO.HIDROXIPROGEST.AC.INY:1 ML FC	INY	0
406	103401A	CAPRO.HIDROXIPROGEST.AC.INY:5 ML FC	INY	0
407	103402	PROGESTERONA OLEOSA INY:10 ML FC	INY	0
408	103402G	PROGESTERONA OLEOSA INY:CONTR.DESC.	INY	1

CLASE 10.35: PSICOTROPICOS

409	103500G	AMITRIPTILINA TAB:CONTR.DESC.	ORAL	1
410	103501	AMITRIPTILINA:25 MG:TAB	ORAL	0
411	103500	AMITRIPTILINA:75 MG:CAP	ORAL	0
412	103502	CLORPROMAZINA INY:25 MG/ML:1 ML AMP	INY	0
413	103502A	CLORPROMAZINA INY:25 MG/ML:2 ML AMP	INY	0
414	103502G	CLORPROMAZINA INY:CONTR.DESC.	INY	1
415	103503G	CLORPROMAZINA TAB:CONTR.DESC.	ORAL	0
416	103503	CLORPROMAZINA:100 MG:TAB	ORAL	0
417	103504G	FLUFENAZINA INY:CONTR.DESC.	INY	1
418	103504	FLUFENAZINA: 25 MG/ML:1 AMP	INY	0
419	103506G	HALOPERIDOL INY:CONTR.DESC.	INY	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
420	103505G	HALOPERIDOL TAB:CONTR.DESC.	ORAL	1
421	103506	HALOPERIDOL: 5 MG/ML:1 ML AMP	INY	0
422	103505	HALOPERIDOL:5 MG: TAB	ORAL	0
423	103508G	IMIPRAMINA INY:CONTR.DESC.	INY	0
424	103508	IMIPRAMINA:13 MG/ML:2 ML AMP	INY	0
425	103507	IMIPRAMINA:25 MG: GG	ORAL	0
426	103507G	IMIPRAMINA:CONTR.Y FORM.DESC.	DESC	1
427	103509G	LEVOMEPRIMAZINA TAB:CONTR.DESC.	ORAL	1
428	103510	LEVOMEPRIMAZINA:100 MG: TAB	ORAL	0
429	103509	LEVOMEPRIMAZINA:25 MG: TAB	ORAL	0
430	103511G	LITIO CARBONATO TAB:CONTR.DESC.	ORAL	1
431	103511	LITIO CARBONATO:300 MG: TAB	ORAL	0
432	103513	TIORIDAZINA (RETARDADA):200 MG: TAB	ORAL	0
433	103512	TIORIDAZINA:25 MG: GG	ORAL	0
434	103512G	TIORIDAZINA:CONTR.Y FORM.DESC.	DESC	1
435	103515G	TRIFLUOPERAZINA GG:CONTR.DESC.	ORAL	0
436	103514	TRIFLUOPERAZINA:1 MG/ML:1 ML AMP	INY	0
437	103515	TRIFLUOPERAZINA:2 MG: GG	ORAL	0
438	103514G	TRIFLUOPERAZINA:CONTR.Y FORM.DESC.	DESC	1

CLASE 10.36: QUERATOPLASTICOS

439	103600G	ALQUITR.HULLA+ALANT.:CONTR.DESC.	TOP	1
440	103600	ALQUITR.HULLA+ALANTOINA:10 GM TUBO	TOP	0
441	103600A	ALQUITR.HULLA+ALANTOINA:40 GM TUBO	TOP	0
442	103601	ALQUITR.HULLA+HIDROC.1%:15 GM TUBO	TOP	0
443	103601G	ALQUITR.HULLA+HIDROC.1%:CONTR.DESC.	TOP	1
444	103602	PODOFILINA EN POLVO: SB	TOP	0
445	103602G	PODOFILINA EN POLVO:CONTR.DESC.	TOP	1

CLASE 10.37: RELAJANTES MUSCULARES

446	103705	BROMURO PANCURONIO:2 MG/ML:2ML AMP	INY	0
447	103705G	BROMURO PANCURONIO:CONTR.DESC.	INY	1
448	103701G	FENOTEROL TAB:CONTR.DESC.	ORAL	0
449	103700	FENOTEROL: ? MG/ML:10 ML AMP	INY	0
450	103701	FENOTEROL:5 MG: TAB	ORAL	0
451	103700G	FENOTEROL:CONTR.Y FORM.DESC.	DESC	1
452	103702G	METOCARBAMOL TAB:CONTR.DESC.	ORAL	1
453	103702	METOCARBAMOL:500 MG: TAB	ORAL	0
454	103703	NEOSTIGMINA:1 MG/ML:1 AMP	INY	0
455	103703G	NEOSTIGMINA:CONTR.DESC.	INY	1
456	103704	SUCCINILCOLINA INY:50 MG/ML:10ML FC	INY	0
457	103704G	SUCCINILCOLINA INY:CONTR.DESC.	INY	1

CLASE 10.38: SIMPATICOMIMETICOS, VASOCONSTRIC

458	103800	ADRENAL.SOL.ACUOSA INY:1 MG/ML:AMP	INY	0
459	103801	ADRENALINA SOL.OFT.:1%:10 ML FC	OFT	0
460	103801G	ADRENALINA SOL.OFT.:CONTR.DESC.	OFT	0
461	103800G	ADRENALINA:CONTR.Y FORM.DESC.	DESC	1
462	103803A	DOPAMINA:40 MG/ML:10 ML FC	INY	0
463	103803	DOPAMINA:40 MG/ML:5 ML FC	INY	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
464	103803G	DOPAMINA:CONTR.DESC.	INY	1
465	103802G	MEFENTERMINA SULF. INY:CONTR.DESC.	INY	1
466	103802A	MEFENTERMINA SULFATO:10 ML AMP	INY	0
467	103802	MEFENTERMINA SULFATO:2 ML AMP	INY	0

CLASE 10.39: SOL. ORAL CORREC., TRASTORNO HID

468	103901G	ELECTROLITOS EN LIQUIDO:CONTR.DESC.	ORAL	0
469	103900	ELECTROLITOS EN POLVO (LITROSOL) SB	ORAL	0
470	103901D	LITODEX 1000 CC: 1000CC: FC	ORAL	0
471	103901B	ORAELECTRIL 1000 ML: 1000ML: FC	ORAL	0
472	103901C	ORAELECTRIL 600 ML: 400ML: FC	ORAL	0
473	103901A	PEDIALYTE: 400ML: FC	ORAL	0
474	103900B	SUERO ORAL: 28GR: SB	ORAL	0
475	103900G	SUERO REHIDRATAACION ORAL: SB	ORAL	1

CLASE 10.40: TIROIDEOS Y ANTITIROIDEOS

476	104000G	L-TIROXINA TAB:CONTR.DESC.	ORAL	1
477	104000	L-TIROXINA:0.3 MG:TAB	ORAL	0
478	104001G	PROPILTIOURACILO TAB:CONTR.DESC.	ORAL	1
479	104001	PROPILTIOURACILO:50 MG:TAB	ORAL	0

CLASE 10.41: URICOSURICOS

480	104100G	ALOPURINOL TAB:CONTR.DESC.	ORAL	1
481	104100	ALOPURINOL:300 MG:TAB	ORAL	0
482	104101G	COLCHICINA TAB:CONTR.DESC.	TAB	1
483	104101	COLCHICINA:1 MG:TAB	ORAL	0

CLASE 10.42: VASODILS. CORONARIOS, ANTIANGINO

484	104200	ISOSORBIDE (DINITR.):5 MG:TAB	ORAL	0
485	104200G	ISOSORBIDE (DINITR.)TAB:CONTR.DESC.	ORAL	1
486	104201	ISOSORBIDE DINITR.SOSTEN.:40 MG:TAB	ORAL	0

CLASE 10.43: VASODILATADORES PERIFERICOS

487	104301G	ISOXSUPRINA INY:CONTR.DESC.	INY	0
488	104300	ISOXSUPRINA:10 MG:TAB	ORAL	0
489	104301	ISOXSUPRINA:5 MG/ML:2 ML AMP	INY	0
490	104300G	ISOXSUPRINA:CONTR.Y FORM.DESC.	DESC	1

CLASE 10.44: VITAMINAS Y MINERALES

491	104400G	AC.ASCORBICO TAB:CONTR.DESC.	ORAL	1
492	104400	AC.ASCORBICO:500 MG:TAB	ORAL	0
493	104401G	AC.FOLICO TAB:CONTR.DESC.	ORAL	1
494	104401	AC.FOLICO:5 MG:TAB	ORAL	0
495	104402G	AC.NICOTINICO TAB:CONTR.DESC.	ORAL	1
496	104402	AC.NICOTINICO:100 MG:TAB	ORAL	0
497	104403A	AQUASOL ACD: 15ML: FC	ORAL	0
498	104403B	DEXTROVITA: 25GR: SB	ORAL	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
499	104403	HEMATINICO VIT.,JARABE: ML	ORAL	0
500	104403G	HEMATINICO VIT.:CONTR.DESC.	ORAL	1
501	104405	MULTIVIT. PRENATALES:CAP	ORAL	0
502	104405G	MULTIVIT. PRENATALES:CONTR.DESC.	ORAL	1
503	104404	MULTIVITAMINAS:CAP	ORAL	0
504	104404G	MULTIVITAMINAS:CONTR.Y FORM.DESC.	ORAL	1
505	104403C	SUERO ORAL VITAMINADO: 4GR: PQ	ORAL	0
506	104408G	SULFATO FERROSO GG:CONTR.DESC.	ORAL	0
507	104406	SULFATO FERROSO GOT.:20 ML FC	ORAL	0
508	104406A	SULFATO FERROSO GOT.:30 ML FC	ORAL	0
509	104407G	SULFATO FERROSO SOL.:CONTR.DESC.	ORAL	0
510	104407	SULFATO FERROSO:10 MG/ML:5 FC	ORAL	0
511	104408	SULFATO FERROSO:300 MG: GG	ORAL	0
512	104406G	SULFATO FERROSO:CONTR.Y FORM.DESC.	DESC	1
513	104409	VIT. "A" :25000 UI:CAP	ORAL	0
514	104409G	VIT. "A" :CONTR.Y FORM.DESC.	DESC	1
515	104410	VIT. "A" INY:50000 UI:2 ML AMP	INY	0
516	104410G	VIT. "A" INY:CONTR.DESC.	INY	0
517	104416G	VIT. "C":CONTR.DESC.	ORAL	1
518	104411	VIT. "D" :50000 UI:CAP	ORAL	0
519	104411G	VIT. "D" CAP:CONTR.DESC.	ORAL	1
520	104414G	VIT. B1 (TIAMINA) INY:CONTR.DESC.	INY	1
521	104414A	VIT. B1 TIAMINA:100 MG/ML:10ML AMP	INY	0
522	104414	VIT. B1 TIAMINA:100 MG/ML:1ML AMP	INY	0
523	104413G	VIT. B1+B6+B12 INY:CONTR.DESC.	INY	1
524	104413	VIT. B1+B6+B12:3 ML AMP	INY	0
525	104415	VIT. B6 (PIRIDOXINA):50 MG:TAB	ORAL	0
526	104415G	VIT. B6 (PIRIDOXINA)TAB:CONTR.DESC.	ORAL	1
527	104412G	VIT. K1 SINTETICA INY:CONTR.DESC.	INY	1
528	104412	VIT. K1 SINTETICA, FITOMENAD.: ML	INY	0

CLASE 11.00: ANESTESICOS GENERALES

529	110000	CAL SODADA, EN GRANULOS: BR	DESC	1
530	110001	DROPERIDOL INY:3 MG/ML:10 ML FC	INY	0
531	110001G	DROPERIDOL INY:CONTR.DESC.	INY	1
532	110007	ENFLURANO:250 ML FC	INH	0
533	110007G	ENFLURANO:CONTR.DESC.	INH	1
534	110002	HALOTANO:250 ML:1 FC	INH	0
535	110002G	HALOTANO:CONTR.DESC.	INH	1
536	110004	KETAMINA CLORHIDR.:50MG/ML:10ML FC	INY	0
537	110003	KETAMINA CLORHIDR.:10 ML FC	INY	0
538	110003A	KETAMINA CLORHIDR.:20 ML FC	INY	0
539	110003G	KETAMINA CLORHIDR.:CONTR.DESC.	INY	1
540	110004G	KETAMINA CLORHIDR.SOL.:CONTR.DESC.	INY	0
541	110005	OXIDO NITROSO CILINDRO:1 CIL	INH	0
542	110005G	OXIDO NITROSO CILINDRO:CONTR.DESC.	INH	1
543	110006	TIOPENTAL SODICO INY:1 GM FC	INY	0
544	110006G	TIOPENTAL SODICO INY:CONTR.DESC.	INY	1

CLASE 11.01: ANESTESICOS LOCALES

545	110100	LIDOCAINA CON EFINEFR.:2%:10 ML FC	TOP	0
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HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
546	110100G	LIDOCAINA CON EPINEFR.:CONTR.DESC.	TOP	1
547	110102	LIDOCAINA CR.:5 %:10 GM TUBO	TOP	0
548	110102A	LIDOCAINA CR.:5 %:35 GM TUBO	TOP	0
549	110102G	LIDOCAINA CR.:CONTR.DESC.	TOP	0
550	110101	LIDOCAINA:2%:25 ML FC	TOP	0
551	110101A	LIDOCAINA:2%:50 ML FC	TOP	0
552	110101G	LIDOCAINA:CONTR.Y FORM.DESC.	TOP	1
553	110103G	MEPIVAC.CLORHI.+LEVON. :CONTR.LESC.	TOP	1
554	110103	MEPIVAC.CLORHI.+LEVONORD.: CA	TOP	0
555	110104	TETRACAINA CLORHIDR.:20 MG:10 MG FC	TOP	0
556	110104G	TETRACAINA CLORHIDRATC:CONTR.DESC.	TOP	1

CLASE 12.00: HORMONALES

557	120000G	ETINILESTRAD.+LEVONORG.:CONTR.DESC.	ORAL	1
558	120001G	ETINILESTRAD.+NORGEST.:CONTR.DESC.	ORAL	1
559	120000	ETINILESTRADIOL+LEVONORGEST.:1 CICL	ORAL	0
560	120001	ETINILESTRADIOL+NORGESTREL:1 CICL	ORAL	0
561	120002G	MENFEGOL VAG TAB:CONTR.DESC.	VAG	1
562	120002	MENFEGOL:60 MG: VAG TAB (TV)	VAG	0
563	120003	NORETINDRONA+MESTRANOL: TAB	ORAL	0
564	120003G	NORETINDRONA+MESTRANOL:CONTR.DESC.	ORAL	1

CLASE 13.00: ANTISEPTICOS

565	130000G	CLORHEX.GLUC.+CETRIMIDA:CONTR.DESC.	TOP	1
566	130000	CLORHEXIDINA GLUC.+CETRIMIDA: ML	TOP	0
567	130004G	MANDELAMINA:CONTR.DESC.	ORAL	1
568	130010G	NALIDIXINA, ACEITE DE:CONTR.DESC.	TOP	1
569	130001	NITRATO DE PLATA:1 %:10 ML FC	TOP	0
570	130001A	NITRATO DE PLATA:1 %:30 ML FC	TOP	0
571	130001G	NITRATO DE PLATA:CONTR.DESC.	TOP	1
572	130003G	SAVLON ANTISEPTICO:CONTR.DESC.	TOP	1
573	130011G	VIOLETA GENTIANA SOL.:CONTR.DESC.	TOP	1
574	130002G	YODO+POLIV.PIRROL.SOL.:CONTR.DESC.	TOP	1
575	130002A	YODO+POLIVIN.PIRROL. SOL.:3785ML FC	TOP	0
576	130002	YODO+POLIVIN.PIRROL. SOL.:500ML FC	TOP	0

CLASE 13.01: SOL. CORRECT. DE TRASTORNOS HIDR

577	130101	BICARBONAT.SODIO:0.8MEQ/ML:10ML AMP	INY	0
578	130101A	BICARBONAT.SODIO:0.8MEQ/ML:50ML AMP	INY	0
579	130101G	BICARBONATO DE SODIO:CONTR.DESC.	INY	1
580	130107G	CLORURO DE POTASIO INY:CONTR.DESC.	INY	1
581	130102G	CLORURO DE SODIO :CONTR.DESC.	IV	1
582	130105	CLORURO DE SODIO:1 %:1000 ML FC	IV	0
583	130103	CLORURO DE SODIO:1 %:250 ML FC	IV	0
584	130102	CLORURO DE SODIO:1 %:500 ML FC	IV	0
585	130104	CLORURO DE SODIO:1 %:500 ML FC	IV	0
586	130107	CLORURO POTAS. INY:2MEQ/ML:10ML AMP	INY	0
587	130118	DEXT.+CL. SODIO:5+0.3% :250 ML FC	IV	0
588	130119	DEXT.+CL. SODIO:5+0.3% :500 ML FC	IV	0
589	130121	DEXT.+CL. SODIO:5+0.45%:1000 ML FC	IV	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
590	130120	DEXT.+CL. SODIO:5+0.45%:500 ML FC	IV	0
591	130122	DEXT.+CL. SODIO:5+0.9% :250 ML FC	IV	0
592	130123	DEXT.+CL. SODIO:5+0.9% :500 FC	IV	0
593	130118G	DEXT.+CLORURO DE SODIO :CONTR.DESC.	IV	1
594	130114	DEXT.EN AGUA :10%:1000 ML FC	IV	0
595	130112	DEXT.EN AGUA :10%:250 ML FC	IV	0
596	130113	DEXT.EN AGUA :10%:500 ML FC	IV	0
597	130111	DEXT.EN AGUA :5% :1000 ML FC	IV	0
598	130109	DEXT.EN AGUA :5% :250 ML FC	IV	0
599	130110	DEXT.EN AGUA :5% :500 ML FC	IV	0
600	130115	DEXT.EN AGUA :50%:50 ML FC	IV	0
601	130109G	DEXT.EN AGUA :CONTR.DESC.	IV	0
602	130116	DEXT.INY:10%:10 ML AMP	IV	1
603	130116G	DEXT.INY:CONTR.DESC.	INY	0
604	130108G	GLUCONATO DE CALCIO INY:CONTR.DESC.	INY	1
605	130108	GLUCONATO DE CALCIO:10 %:10 ML AMP	INY	1
606	130125A	LACTATO SODIO+ELECTR. IV:1000 ML FC	IV	0
607	130125	LACTATO SODIO+ELECTR. IV:500ML FC	IV	0
608	130125G	LACTATO SODIO+ELECTROL.:CONTR.DESC.	IV	0
609	130124	SOL.RINGER: 500 ML FC	IV	1
610	130124G	SOL.RINGER:CONTR.DESC.	IV	0
			IV	1

CLASE 13.02: SOLUCIONES PARA DIALISIS PERITON

611	130202	SOL.PARA DIALISIS:2 %:1000 ML FC	IV	0
612	130200	SOL.PARA DIALISIS:2 %:250 ML FC	IV	0
613	130201	SOL.PARA DIALISIS:2 %:500 ML FC	IV	0
614	130203	SOL.PARA DIALISIS:4.25 %:1000 ML FC	IV	0
615	130200G	SOL.PARA DIALISIS:CONTR.DESC.	IV	1

CLASE 13.03: SOLVENTES

616	130300G	AGUA DESTILADA INY:CONTR.DESC.	INY	1
617	130301	AGUA DESTILADA: :10 ML AMP	INY	0
618	130300	AGUA DESTILADA: :5 ML AMP	INY	0
619	130302	ALCOHOL ETILICO 250 LT BR	TOP	0
620	130302G	ALCOHOL METIL. O ETIL.:CONTR.DESC.	TOP	1
621	130303	ALCOHOL METILICO 200 LT BR	TOP	0

CLASE 14.00: SUEROS E INMUNOGLOBULINAS

622	140000G	INMUNOGL.H.ANTI R.H.INY:CONTR.DESC.	INY	1
623	140000	INMUNOGL.HUM. ANTI R.H.INY:1 AMP FC	INY	0
624	140001G	INMUNOGL.HUM.G.GLOB.INY:CONTR.DESC.	INY	1
625	140001A	INMUNOGLOB.HUM. G.GLOB. INY:10ML FC	INY	0
626	140001	INMUNOGLOB.HUM. G.GLOB. INY:1ML FC	INY	0
627	140002G	SUERO ANTIOFID.POLIVAL.:CONTR.DESC.	INY	1
628	140002	SUERO ANTIOFIDICO POLIVAL.:10 ML FC	INY	0

CLASE 14.01: PRODUCTOS PROFILAC. PARA LA RABI

629	140102G	SUERO ANTIRRAB.(EQUINO):CONTR.DESC.	INY	1
630	140102	SUERO ANTIRRABICO (EQUINO): ML	INY	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
631	140101	VAC.ANTIRRABICA CANINA: :50 ML FC	INY	0
632	140100	VAC.ANTIRRABICA HUM. (HDCV): 1 AMP	INY	0
633	140100G	VAC.ANTIRRABICA:CONTR.DESC.	INY	1

CLASE 14.02: VACUNAS BACTERIANAS Y VIRALES

634	140200	VAC.B.C.G.(10 DOSIS): :1 AMP	INY	0
635	140200G	VAC.B.C.G.:CONTR.DESC.	INY	1
636	140202	VAC.D.P.T.: :5 ML FC	INY	0
637	140202G	VAC.D.P.T.:CONTR.DESC.	INY	1
638	140203	VAC.DE LA POLIO: :2 ML FC	INY	0
639	140203G	VAC.DE LA POLIO:CONTR.DESC.	INY	1
640	140201G	VAC.SARAMPION LIOFILIZ.:CONTR.DESC.	INY	1
641	140201	VAC.SARAMPION LIOFILIZADO:1 ML FC	INY	0

CLASE 14.03: TOXOIDES

642	140300	TOXOIDE TETANICO: :5 ML FC	INY	0
643	140300G	TOXOIDE TETANICO:CONTR.DESC.	INY	1

CLASE 14.04: ANTITOXINAS

644	140400	ANTIT.TETANICA:5000 UI/VIAL:1 VIAL	INY	0
645	140401	ANTITO.DIFTERI.:10000UI/VIAL:1 VIAL	INY	0
646	140401G	ANTITOXINA DIFTERICA:CONTR.DESC.	INY	1
647	140400G	ANTITOXINA TETANICA:CONTR.DESC.	INY	1

CLASE 14.05: TEST DE DIAGNOSTICO BIOL. (IN VI

648	140500	TEST DE TUBERCULINA (DPP): 20 ML FC	INY	0
649	140500A	TEST DE TUBERCULINA (DPP): 50 ML FC	INY	0
650	140500G	TEST TUBERCULINA (DPP):CONTR.DESC.	INY	1

CLASE 15.00: PRODUCTOS PARA DIAGNOSTICO

651	150000G	ACEITE YODADO AMAPOLA:CONTR.DESC.	TOP	1
652	150000	ACEITE YODADO DE AMAPOLA:20 ML FC	TOP	0
653	150001	CICLOPENTOLATO GOT.OFT.:1 %:5 ML FC	OFT	0
654	150001A	CICLOPENTOLATO GOT.OFT.:1%:15 ML FC	OFT	0
655	150001G	CICLOPENTOLATO GOT.OFT.:CONTR.DESC.	OFT	1
656	150002	FLUORESCENCIA SODICA: 2%: 15 ML FC	TOP	0
657	150002G	FLUORESCENCIA SODICA:CONTR.DESC.	TOP	1
658	150003G	MANITOL INY:CONTR.DESC.	INY	1
659	150003	MANITOL:10 %:250 ML FC	INY	0
660	150004G	MONOYODO ESTEAR. ETILO:CONTR.DESC.	TOP	1
661	150004	MONOYODO ESTEAR.ETILO (YODO):5ML FC	TOP	0
662	150005	TROPICAMIDA (SOL.OFT.):1 %:15 ML FC	OFT	0
663	150005G	TROPICAMIDA (SOL.OFT.):CONTR.DESC.	OFT	1

CLASE 16.00: MEDIOS DE CONTRASTE RADIOLOGICO

664	160000	DIATRIZOATO MEGL.O SOD.:50%:20ML FC	ORAL	0
665	160000A	DIATRIZOATO MEGL.O SOD.:50%:50ML FC	ORAL	0

HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
666	160001	DIATRIZOATO MEGL.O SOD.:75%:20ML FC	ORAL	0
667	160001A	DIATRIZOATO MEGL.O SOD.:75%:50ML FC	ORAL	0
668	160000G	DIATRIZOATO MEGL.O SOD.:CONTR.DESC.	ORAL	1
669	160005G	SULFATO BARIO (POLVO):CONTR.DESC.	ORAL	1
670	160005	SULFATO DE BARIO (POLVO): BR	ORAL	0
671	160002G	YODOGLICAM.MEGL.O SOD.:CONTR.DESC.	ORAL	1
672	160002A	YODOGLICAMATO MEGL.O SOD.:100 ML FC	ORAL	0
673	160002	YODOGLICAMATO MEGL.O SOD.:25 ML FC	ORAL	0
674	160004	YODOPODATO DE SODIO:CAP	ORAL	0
675	160004G	YODOPODATO DE SODIO:CONTR.DESC.	ORAL	1
676	160003G	YODOTALAM.MEGL.O SOD. :CONTR.DESC.	ORAL	1
677	160003A	YODOTALAMATO MEGL.O SOD.:100 ML FC	ORAL	0
678	160003	YODOTALAMATO MEGL.O SOD.:20 ML FC	ORAL	0

CLASE 17.00: PRODUCTOS MISCELANEO

679	170000	BROMURO ERGOCRIPTINA:3 MG:TAB	ORAL	0
680	170000G	BROMURO ERGOCRIPTINA:CONTR.DESC.	ORAL	1
681	170006G	COMBIASE:CONTR.DESC.	ORAL	1
682	170001	DIMETOTIAZINA:20 MG: GG	ORAL	0
683	170001G	DIMETOTIAZINA:CONTR.Y FORM.DESC.	ORAL	1
684	170002G	DISULFIRAN TAB:CONTR.DESC.	ORAL	1
685	170002	DISULFIRAN:200 MG:TAB	ORAL	0
686	170003	LACTULOSA, JARABE:15 ML FC	ORAL	0
687	170003A	LACTULOSA, JARABE:30 ML FC	ORAL	0
688	170003G	LACTULOSA, JARABE:CONTR.DESC.	ORAL	1
689	170004G	METOXALEN CAP:CONTR.DESC.	ORAL	1
690	170004	METOXALEN:10 MG:CAP	ORAL	0
691	170005G	PROBENECID TAB:CONTR.DESC.	ORAL	1
692	170005	PROBENECID:500 MG:TAB	ORAL	0

CLASE 18.00: ANTIDIARREICOS

693	180001J	ACROMAXPECTIN: 100ML: FC	ORAL	0
694	180005G	ANTIDIAR.CON HIDROXYQ.:CONTR.DESC.	ORAL	1
695	180002G	ANTIDIAR.CON KAOLIN-PEC:CONTR.DESC.	ORAL	1
696	180004G	ANTIDIAR.CON NIFUROXIZ.:CONTR.DESC.	ORAL	1
697	180003G	ANTIDIAR.CON STREPTOMY.:CONTR.DESC.	ORAL	1
698	180006G	ANTIDIAR.CON SULFA:CONTR.DESC.	ORAL	0
699	180001G	ANTIDIARR.CON NEOMYCIN:CONTR.DESC.	ORAL	1
700	180002I	ANTIDIARREICO CONCENTRADO:120 CC:FC	ORAL	0
701	180000G	ANTIDIARREICO:CONTR.DESC.	ORAL	1
702	180001D	BACTERIOTAL: 60ML: FC	ORAL	0
703	180001C	CAOLIN PECTINA + NEOMICINA: 120ML:	ORAL	0
704	180002C	CAOLIN PECTINA: 120ML: FC	ORAL	0
705	180004B	ESKAPAR: 90ML: FC	ORAL	0
706	180003C	ESTREPOPECTINA: 60ML: FC	ORAL	0
707	180003D	ESTREPTOENTEROL: 60ML: FC	ORAL	0
708	180006A	GABBRORAL: 60ML: FC	ORAL	0
709	180005A	GASTROLEINA: 120ML: FC	ORAL	0
710	180002A	INFANTPECTIN: 120ML: FC	ORAL	0
711	180003A	INTESTICORT: 60ML: FC	ORAL	0
712	180004A	KAOFUROL: 60ML: FC	ORAL	0



HONDURAS R&DD LISTA DE MEDICAMENTOS

NUMERO DEL REGISTRO	CODIGO DE MEDICAMENTO	NOMBRE DE MEDICAMENTO	UNIDAD DE SALID.	PARA AGRUPAR
713	180001E	KAOLAN CON NEOMICINA: 60ML: FC	ORAL	0
714	180002B	KAOLAN: 120ML: FC	ORAL	0
715	180001H	KAOMYCIN: 120ML: FC	ORAL	0
716	180001F	KAOMYCIN: 59ML: FC	ORAL	0
717	180002H	KAOPECTATE CONCENTR.: 180 ML:FC	ORAL	0
718	180002F	KAOPECTATE: 177 ML: FC	ORAL	0
719	180002E	MIXTURA: 120ML: FC	ORAL	0
720	180001B	NEOPEC-K: 120ML: FC	ORAL	0
721	180002D	STOP: 120ML: FC	ORAL	0
722	180003B	STREPTOMAGMA: 90ML: FC	ORAL	0
723	180001	SULPECTIL CON NEOMYCIN:15 ML:FC	ORAL	0
724	180001A	SULPECTIL: 120ML: FC	ORAL	0
725	180001I	TREDA: 75ML: FC	ORAL	0

CLASE 99.00: TERAPEUTICA DESCONOCIDA

726	ILEG	** ILEGIBLE NOMBRE **		1
727	NOSE	** NO SE RECETO **		1
728	OTRO	** OTROS LIQUIDOS **	ORAL	1

REGISTROS IMPRESADOS: 728

H. Prescribing Data Collection Form

FORMULARIO DE PACIENTES

HOSPITAL/CESAMO/CESAR: _____

NUMERO DE ENCUESTADOR: _____ DATE: _____

# ID	FECHA	NOMBRE	EDAD	SEXO	PRESCR.
ENFERMEDAD	DIAGNOSTICO		CODIGO		
	1.				
	2.				
	3.				
MEDICAMENTOS	NOMBRE Y CONCENTRACION		CODIGO		UNIDADES
	1.				
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				

# ID	FECHA	NOMBRE	EDAD	SEXO	PRESCR.
ENFERMEDAD	DIAGNOSTICO		CODIGO		
	1.				
	2.				
	3.				
MEDICAMENTOS	NOMBRE Y CONCENTRACION		CODIGO		UNIDADES
	1.				
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				

# ID	FECHA	NOMBRE	EDAD	SEXO	PRESCR.
ENFERMEDAD	DIAGNOSTICO		CODIGO		
	1.				
	2.				
	3.				
MEDICAMENTOS	NOMBRE Y CONCENTRACION		CODIGO		UNIDADES
	1.				
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				

# ID	FECHA	NOMBRE	EDAD	SEXO	PRESCR.
ENFERMEDAD	DIAGNOSTICO		CODIGO		
	1.				
	2.				
	3.				
MEDICAMENTOS	NOMBRE Y CONCENTRACION		CODIGO		UNIDADES
	1.				
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				

I. Examples of Screens from the Translated RxDD Program

18

Problema de salud - Modificar
Pantalla de informacion sobre problemas de salud

Codigo de problema : 1.00
Nombre problema salud : ENFERMEDAD DIARREICA
Nombre traducido : ENFERMEDAD DIARREICA

Nombre de clase : 1.00
Nombre de clase : INFECCIOSO Y PARASITARIO
Es problema de grupo : 1 Yes
Codigo de grupo : 1.00

R# : 1 Out of 173

F1=Ayuda F2=Buscar/Eliminar F3=Codigos PgUp/PgDn=Antes/Sigue Esc=Salir

Drogas - Modificar
Pantalla de informacion de drogas

Codigo de droga : 100000
Nombre de droga : ACETAMINOFEN:24 MG/ML:60 ML FC
Nombre droga trasladada : ACETAMINOFEN:24 MG/ML:60 ML FC
Droga es generica : 0 No Codigo generico : 100000G

Clase terapeutica : 10.00 ANALGESICOS: ANTIPIRETS. Y ANTIINFLAM.
Tipo de unidad basica : ML Unidad basic por UI o Mg: 24.000
Tipo de cuenta de unidad:
basico unidad/Cuent.Un: 0
Costo/Unidad de conteo : 0.00
Costo/Unidad basica : 0.000
Forma de dosificacion : ORAL Miligramos/dosis diarias: 0.000

Es inyectado : 0 No Es Antibiotico : 0 No

R# : 9 Out of 728

F1=Ayuda F2=Buscar/Eliminar F3=Codigos PgUp/PgDn=Antes/Sigue Esc=Salir

- J. Examples of Reports Which Contrast Locations (Facilities) on Key Prescribing Parameters for: (1) All Cases; (2) Acute Diarrhea Only; and (3) Parasitic Infestation Only; and (4) ORS Use Among Cases of Acute Diarrhea

**PATIENT VISITS AND BASIC PRESCRIBING INDICATORS
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, HOSPITALS
ANY DIAGNOSES INDICATING DIARRHEA OR PARASITES**

LOCATION CODE	LOCATION NAME	TOTAL CASES	% FEMALE	% UNDER 5	AVERAGE DRUGS PER CASE	% CASES RECEIVING ANTI-BIOTICS	% CASES RECEIVING INJECTIONS	% CASES RECEIVING ORS
ALL LOCATIONS IN REPORT		1,080	51.7%	64.0%	2.6	43.5%	19.1%	44.9%
CMO CENTROS DE SALUD COM MEDICO								
015	CESAMO A	24	50.0%	70.8%	2.5	58.3%	29.2%	58.3%
014	CESAMO B	24	37.5%	79.2%	2.4	16.7%	16.7%	50.0%
013	CESAMO C	24	54.2%	70.8%	2.3	16.7%	0.0%	50.0%
012	CESAMO D	36	47.2%	72.2%	2.4	41.7%	5.6%	50.0%
011	CESAMO E	40	52.5%	67.5%	2.2	42.5%	22.5%	50.0%
001	CESAMO F	53	50.9%	52.8%	2.3	39.6%	7.5%	35.8%
002	CESAMO G	39	56.4%	64.1%	2.5	20.5%	7.7%	48.7%
003	CESAMO H	24	79.2%	62.5%	2.0	45.8%	0.0%	62.5%
004	CESAMO I	25	60.0%	72.0%	3.0	52.0%	32.0%	28.0%
005	CESAMO J	22	50.0%	63.6%	2.5	22.7%	4.5%	45.5%
006	CESAMO K	36	44.4%	58.3%	2.7	47.2%	19.4%	52.8%
022	CESAMO L	38	52.6%	65.8%	2.9	55.3%	15.8%	44.7%
021	CESAMO M	36	52.8%	94.4%	2.5	41.7%	27.8%	72.2%
020	CESAMO N	24	41.7%	62.5%	3.0	45.8%	12.5%	37.5%
019	CESAMO O	46	45.7%	80.4%	2.3	43.5%	19.6%	58.7%
GROUP TOTAL		491	51.9%	69.1%	2.5	39.9%	14.9%	49.7%
CSR CENTROS DE SALUD RURAL								
018	CESAR A	25	64.0%	68.0%	2.9	48.0%	12.0%	40.0%
017	CESAR B	22	45.5%	45.5%	2.6	36.4%	0.0%	36.4%
016	CESAR C	24	58.3%	41.7%	2.8	20.8%	12.5%	50.0%
007	CESAR D	18	66.7%	61.1%	2.7	61.1%	5.6%	27.8%
008	CESAR E	31	51.6%	64.5%	2.4	90.3%	9.7%	51.6%
009	CESAR F	18	50.0%	38.9%	3.2	38.9%	0.0%	38.9%
010	CESAR G	24	25.0%	58.3%	2.2	12.5%	4.2%	45.8%
026	CESAR H	24	45.8%	75.0%	3.0	54.2%	8.3%	54.2%
025	CESAR I	39	71.8%	48.7%	2.3	20.5%	5.1%	33.3%
024	CESAR J	28	59.0%	57.1%	3.8	50.0%	17.9%	57.1%
023	CESAR K	33	57.6%	51.5%	3.6	57.6%	21.2%	24.2%
GROUP TOTAL		286	54.4%	55.6%	2.9	44.8%	9.4%	41.6%
HOS HOSPITALES								
028	HOSPITAL A	129	55.0%	46.5%	2.2	37.2%	13.2%	30.2%
027	HOSPITAL B	174	44.3%	76.4%	2.7	56.3%	51.1%	47.7%
GROUP TOTAL		303	48.8%	63.7%	2.5	48.2%	35.0%	40.3%

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**PATIENT VISITS AND BASIC PRESCRIBING INDICATORS
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, HOSPITALS
DIAGNOSES OF ACUTE DIARRHEA WITH NO OTHER CONDITIONS**

LOCATION CODE	LOCATION NAME	TOTAL CASES	% FEMALE	% UNDER 5	AVERAGE DRUGS PER CASE	% CASES RECEIVING ANTI-BIOTICS	% CASES RECEIVING INJECTIONS	% ORS
ALL LOCATIONS IN REPORT		424	48.8%	81.0%	2.4	47.9%	17.2%	65.8%
CMO CENTROS DE SALUD CON MEDICO								
015	CESAMO A	12	50.0%	91.7%	2.5	50.0%	33.3%	66.7%
014	CESAMO B	12	50.0%	83.3%	2.1	25.0%	8.3%	66.7%
013	CESAMO C	11	36.4%	90.9%	2.1	27.3%	0.0%	81.8%
012	CESAMO D	20	40.0%	95.0%	2.1	45.0%	0.0%	65.0%
011	CESAMO E	15	53.3%	100.0%	1.9	46.7%	6.7%	86.7%
001	CESAMO F	23	43.5%	65.2%	2.5	56.5%	8.7%	56.5%
002	CESAMO G	14	50.0%	71.4%	2.2	21.4%	0.0%	57.1%
003	CESAMO H	11	72.7%	90.9%	2.2	72.7%	0.0%	81.8%
004	CESAMO I	8	37.5%	100.0%	2.6	50.0%	12.5%	50.0%
005	CESAMO J	8	25.0%	100.0%	2.3	25.0%	0.0%	87.5%
006	CESAMO K	16	50.0%	81.3%	2.9	43.8%	12.5%	68.8%
022	CESAMO L	9	44.4%	66.7%	2.7	55.6%	0.0%	55.6%
021	CESAMO M	13	38.5%	92.3%	1.8	15.4%	7.7%	100.0%
020	CESAMO N	7	57.1%	100.0%	3.4	57.1%	0.0%	85.7%
019	CESAMO O	18	55.6%	94.4%	1.9	38.9%	5.6%	72.2%
GROUP TOTAL		197	47.9%	87.7%	2.3	42.1%	6.6%	71.1%
CSR CENTROS DE SALUD RURAL								
018	CESAR A	5	100.0%	80.0%	2.4	40.0%	0.0%	80.0%
017	CESAR B	6	33.3%	83.3%	2.8	66.7%	0.0%	100.0%
016	CESAR C	9	88.9%	44.4%	3.1	22.2%	11.1%	88.9%
007	CESAR D	8	50.0%	87.5%	2.8	87.5%	0.0%	50.0%
008	CESAR E	12	50.0%	58.3%	2.1	91.7%	0.0%	58.3%
009	CESAR F	6	33.3%	83.3%	3.2	66.7%	0.0%	83.3%
010	CESAR G	5	0.0%	60.0%	1.6	0.0%	0.0%	100.0%
026	CESAR H	5	20.0%	100.0%	3.0	20.0%	0.0%	100.0%
025	CESAR I	13	61.5%	92.3%	2.2	23.1%	0.0%	76.9%
024	CESAR J	8	75.0%	75.0%	3.4	37.5%	0.0%	87.5%
023	CESAR K	3	0.0%	66.7%	3.3	100.0%	0.0%	66.7%
GROUP TOTAL		80	53.2%	75.0%	2.6	50.0%	1.3%	78.8%
HOS HOSPITALES								
028	HOSPITAL A	42	57.1%	64.3%	2.1	42.9%	9.5%	47.6%
027	HOSPITAL B	105	43.8%	80.0%	2.5	59.0%	52.4%	53.3%
GROUP TOTAL		147	47.6%	75.5%	2.4	54.4%	40.1%	51.7%

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PATIENT VISITS AND BASIC PRESCRIBING INDICATORS
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, HOSPITALS
DIAGNOSES OF PARASITES WITH NO OTHER CONDITION

LOCATION CODE	LOCATION NAME	TOTAL CASES	% FEMALE	% UNDER 5	AVERAGE DRUGS PER CASE	% CASES RECEIVING ANTI-BIOTICS	% CASES RECEIVING INJECTIONS	% ORS
ALL LOCATIONS IN REPORT		255	53.5%	34.9%	2.2	12.2%	6.3%	11.4%
CMD CENTROS DE SALUD CON MEDICO								
015	CESAMO A	6	66.7%	33.3%	2.0	50.0%	16.7%	16.7%
014	CESAMO B	2	0.0%	100.0%	2.0	0.0%	0.0%	50.0%
013	CESAMO C	6	83.3%	66.7%	2.5	0.0%	0.0%	0.0%
012	CESAMO D	7	57.1%	42.9%	2.4	14.3%	14.3%	14.3%
011	CESAMO E	16	62.5%	25.0%	1.9	31.3%	18.8%	6.3%
001	CESAMO F	11	63.6%	27.3%	1.7	0.0%	0.0%	9.1%
002	CESAMO G	8	62.5%	25.0%	1.8	0.0%	0.0%	0.0%
003	CESAMO H	10	90.0%	30.0%	1.5	10.0%	0.0%	30.0%
004	CESAMO I	7	85.7%	71.4%	2.9	14.3%	28.6%	14.3%
005	CESAMO J	9	66.7%	22.2%	2.7	22.2%	0.0%	22.2%
006	CESAMO K	8	37.5%	12.5%	1.9	12.5%	0.0%	12.5%
022	CESAMO L	14	42.9%	57.1%	2.6	14.3%	0.0%	7.1%
021	CESAMO M	2	0.0%	100.0%	2.5	50.0%	100.0%	0.0%
020	CESAMO N	9	22.2%	33.3%	2.2	0.0%	0.0%	0.0%
019	CESAMO O	12	41.7%	50.0%	1.8	16.7%	8.3%	16.7%
GROUP TOTAL		127	57.1%	39.4%	2.1	15.0%	7.9%	11.8%
CSR CENTROS DE SALUD RURAL								
018	CESAR A	5	60.0%	20.0%	2.4	0.0%	0.0%	0.0%
017	CESAR B	13	38.5%	38.5%	2.5	23.1%	0.0%	7.7%
016	CESAR C	10	30.0%	50.0%	2.6	10.0%	10.0%	30.0%
007	CESAR D	3	100.0%	33.3%	1.7	0.0%	0.0%	0.0%
009	CESAR F	7	42.9%	14.3%	3.3	0.0%	0.0%	14.3%
010	CESAR G	14	35.7%	50.0%	2.1	7.1%	7.1%	21.4%
026	CESAR H	3	66.7%	66.7%	1.7	0.0%	0.0%	33.3%
025	CESAR I	13	76.9%	23.1%	1.8	7.7%	0.0%	7.7%
024	CESAR J	5	40.0%	20.0%	3.2	0.0%	0.0%	0.0%
023	CESAR K	5	60.0%	40.0%	2.6	0.0%	0.0%	0.0%
GROUP TOTAL		78	50.0%	35.9%	2.4	7.7%	2.6%	12.8%
HOS HOSPITALES								
028	HOSPITAL A	45	46.7%	20.0%	1.8	11.1%	6.7%	6.7%
027	HOSPITAL B	5	80.0%	40.0%	2.8	20.0%	20.0%	20.0%
GROUP TOTAL		50	50.0%	22.0%	1.9	12.0%	8.0%	8.0%

SUMMARY OF ORS USE BY LOCATION
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, HOSPITALS
DIAGNOSES OF DIARRHEA WITH OR OTHER CONDITION

CODE	LOCATION NAME	TOTAL	%		NUMBER OF ORS SACHETS DISPENSED (ALL AGES, WHERE AMOUNT IS KNOWN)					% WITH UNKNOWN AMOUNT		
			<5 YRS	>=5 YRS	<5 YRS	>=5 YRS	1	2	3		4	5+
ALL LOCATIONS IN REPORT		424	342	80	73.7%	31.3%	8.5%	45.5%	40.9%	4.0%	1.1%	36.9%
CMO CENTROS DE SALUD CON MEDICO												
015	CESAMO A	12	11	1	72.7%	0.0%	***.8%	***.8%	***.8%	***.8%	***.8%	100.0%
014	CESAMO B	12	10	2	69.0%	100.0%	28.6%	28.6%	42.9%	0.0%	0.0%	12.5%
013	CESAMO C	11	10	1	80.0%	100.0%	33.3%	11.1%	22.2%	33.3%	0.0%	0.0%
012	CESAMO D	20	19	1	63.2%	100.0%	12.5%	87.5%	0.0%	0.0%	0.0%	38.5%
011	CESAMO E	15	15	0	86.7%	***.8%	0.0%	40.0%	60.0%	0.0%	0.0%	61.5%
001	CESAMO F	23	15	7	65.7%	28.6%	50.0%	25.0%	0.0%	25.0%	0.0%	38.5%
002	CESAMO G	14	10	4	70.0%	25.0%	14.3%	57.1%	28.6%	0.0%	0.0%	12.5%
003	CESAMO H	11	10	1	80.0%	100.0%	0.0%	77.8%	22.2%	0.0%	0.0%	0.0%
004	CESAMO I	8	8	0	50.0%	***.8%	***.8%	***.8%	***.8%	***.8%	***.8%	100.0%
005	CESAMO J	8	8	0	87.5%	***.8%	14.3%	42.9%	42.9%	0.0%	0.0%	0.0%
006	CESAMO K	16	13	3	84.6%	0.0%	0.0%	25.0%	75.0%	0.0%	0.0%	27.3%
022	CESAMO L	9	6	3	83.3%	0.0%	0.0%	0.0%	50.0%	25.0%	25.0%	20.0%
021	CESAMO M	13	12	0	100.0%	***.8%	0.0%	23.1%	76.9%	0.0%	0.0%	0.0%
020	CESAMO N	7	7	0	85.7%	***.8%	16.7%	0.0%	83.3%	0.0%	0.0%	0.0%
019	CESAMO O	18	17	1	76.6%	100.0%	0.0%	72.7%	27.3%	0.0%	0.0%	15.4%
TOTAL FOR THIS GROUP:		197	171	24	75.4%	37.5%	12.7%	40.2%	40.2%	5.9%	1.0%	27.1%
CSR CENTROS DE SALUD RURAL												
018	CESAR A	5	4	1	75.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
017	CESAR B	6	5	1	100.0%	100.0%	0.0%	33.3%	50.0%	16.7%	0.0%	0.0%
016	CESAR C	9	4	5	100.0%	80.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
007	CESAR D	8	7	1	57.1%	0.0%	33.3%	0.0%	33.3%	0.0%	33.3%	25.0%
008	CESAR E	12	7	5	71.4%	40.0%	0.0%	85.7%	14.3%	0.0%	0.0%	0.0%
009	CESAR F	6	5	1	100.0%	0.0%	0.0%	40.0%	60.0%	0.0%	0.0%	0.0%
010	CESAR G	5	3	2	100.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
026	CESAR H	5	5	0	100.0%	***.8%	0.0%	40.0%	60.0%	0.0%	0.0%	0.0%
025	CESAR I	13	12	1	75.0%	100.0%	0.0%	10.0%	90.0%	0.0%	0.0%	0.0%
024	CESAR J	8	6	2	83.3%	100.0%	20.0%	40.0%	40.0%	0.0%	0.0%	28.6%
023	CESAR K	3	2	1	50.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	50.0%
TOTAL FOR THIS GROUP:		80	60	20	81.7%	70.0%	3.4%	47.5%	45.8%	1.7%	1.7%	6.3%
HOS HOSPITALES												
028	HOSPITAL A	42	27	15	70.4%	6.7%	0.0%	69.2%	30.8%	0.0%	0.0%	35.0%
027	HOSPITAL B	105	94	21	65.5%	4.8%	0.0%	100.0%	0.0%	0.0%	0.0%	96.4%
TOTAL FOR THIS GROUP:		147	111	36	66.7%	5.6%	0.0%	73.3%	26.7%	0.0%	0.0%	80.3%

- K. Examples of Reports Which Compare the Use of Drugs by Generic Category Among Subgroups of Cases for: (1) All Cases; (2) Acute Diarrhea Only; and (2) Parasitic Infestation Only

**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
ANALGESICOS: ANTIPIRETS. Y ANTIINFLAM.						
1000006 ACETAMINOFEN	DESC	13.4%	6.4%	10.4%	11.2%	11.0%
1000026 AC.ACETILSALICILICO	ORAL	9.2%	6.4%	9.9%	6.6%	8.1%
1000056 DAPIRONA	INY	1.1%	0.3%	0.9%	0.6%	0.8%
1000096 NAPROXEN TAB	ORAL	0.0%	0.3%	0.0%	0.2%	0.1%
1000136 NONESTER.ANTIINFL.TAB	ORAL	0.0%	0.3%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.24	0.14	0.21	0.19	0.20
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		9.0%	6.0%	8.2%	7.4%	7.8%
ANALGESICOS, NARCOTS. Y ANTAGONS.						
1001036 NALOXONA	INY	0.2%	0.3%	0.0%	0.4%	0.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.1%	0.1%	0.0%	0.2%	0.1%
ANALGESICOS DE USO TOPICO						
1002006 ANTIPIR.+BENZ.+HIDROX.	TOP	0.2%	0.0%	0.2%	0.0%	0.1%
1002016 SALICILATO DE METILO	TOP	0.0%	0.9%	0.5%	0.2%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.01	0.01	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.1%	0.4%	0.3%	0.1%	0.2%
ANTIACIDOS Y ANTIULCEROSUS						
1003006 CIMETIDINA	DESC	0.2%	0.3%	0.2%	0.2%	0.2%
1003026 HIDRO.AL.Y MAGN.+DIMET.	ORAL	0.2%	1.4%	0.9%	0.2%	0.7%
1003036 PEPTO BISMOL	ORAL	0.2%	0.0%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.02	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.2%	0.8%	0.5%	0.2%	0.4%
ANTIBACTERIANOS						
1005006 AMIKACINA INY	INY	0.2%	0.0%	0.2%	0.0%	0.1%
1005026 AMPICILINA SUSP.ORAL	ORAL	5.6%	2.3%	3.8%	4.9%	4.3%
1005036 AMPICILINA	DESC	0.4%	3.8%	0.9%	2.3%	1.7%
1005106 CLORANFENICOL	DESC	0.5%	0.3%	0.7%	0.2%	0.4%
1005166 ERITROMICINA	DESC	5.8%	1.2%	4.7%	4.0%	4.3%
1005186 GENTAMICINA INY	INY	0.4%	0.3%	0.2%	0.4%	0.3%
1005236 PENICILINA PROCAIN.INY	INY	0.9%	0.9%	1.2%	0.8%	1.0%
1005246 PENICILINA BENZATIN.INY	INY	9.9%	6.1%	9.9%	7.2%	8.5%
1005256 TETRACICLINA CAP	ORAL	0.2%	1.2%	0.7%	0.4%	0.6%
1005276 TRIMETO+SULFAMET	ORAL	33.1%	7.8%	27.7%	20.1%	23.6%
1005306 PIPERACILINA INY	INY	0.4%	0.9%	0.2%	0.8%	0.6%

**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY					
		AGE GROUP		SEX CATEGORY		ALL PATIENTS	
		UNDER 5	5 & OVER	MALE	FEMALE		
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.57	0.25	0.50	0.41	0.46	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		21.7%	10.9%	19.3%	16.1%	17.6%	
ANTIBACTERIANOS LOCALES							
100601G	GENTAMICINA 60T.OFT.	OFT	0.2%	0.3%	0.0%	0.4%	0.2%
100602G	OXITET.CLORHIDR.UN.OFT.	OFT	0.2%	0.3%	0.2%	0.2%	0.2%
100605G	SULFADIAZINA DE PLATA	TOP	0.0%	0.3%	0.0%	0.2%	0.1%
100607G	OXITET.+POLIM.UNG.OFT.	OFT	0.0%	0.3%	0.0%	0.2%	0.1%
100609G	WHITFIELD UNG.TOPIC.	TOP	6.5%	0.0%	0.2%	0.4%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.01	0.00	0.01	0.01	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.5%	0.2%	0.6%	0.4%	
ANTIEMETICOS							
100900G	METOCLOPRAMIDA	DESC	0.0%	0.3%	0.0%	0.2%	0.1%
100902G	MECLIZINA 60T.PED.	ORAL	4.0%	0.6%	2.6%	3.0%	2.8%
100903G	BONODOXINA 60T.	ORAL	3.3%	1.4%	3.1%	2.1%	2.6%
100905G	DIMENHIDRANATA	DESC	0.4%	0.0%	0.0%	0.4%	0.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.08	0.02	0.06	0.06	0.06	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		2.9%	1.0%	2.2%	2.2%	2.2%	
ANTIESPASMODICOS							
101000G	ANTIESPAS.+ANALG.ADULTO	ORAL	0.5%	14.2%	4.5%	7.0%	5.8%
101001G	ANTIESPASM.INFANT.	ORAL	5.6%	3.2%	5.0%	5.3%	5.1%
101002G	ANTIESPASM.+ANALG.INY	INY	0.0%	1.2%	0.5%	0.4%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.06	0.18	0.10	0.13	0.11	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		2.3%	8.2%	3.8%	5.0%	4.4%	
ANTHELMINTICOS							
101100G	MEBENDAZOLE SUSP OR	ORAL	13.6%	14.7%	18.0%	12.7%	15.1%
101101G	MEBENDAZOLE TAB	ORAL	0.7%	17.9%	6.6%	8.7%	7.7%
101102G	NICLOSAMIDA TAB	ORAL	0.4%	0.3%	0.5%	0.2%	0.3%
101103G	PIPERAZINA CITR.	ORAL	16.8%	22.0%	17.5%	22.0%	19.8%
101105G	ALBENDAZOLE TAB	ORAL	0.0%	0.3%	0.0%	0.4%	0.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.31	0.55	0.43	0.44	0.43	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		11.9%	24.5%	16.3%	17.2%	16.7%	
ANTIHIPERTENSIVOS							
101200G	ALFAMETILDOPA TAB	ORAL	0.0%	0.3%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.1%	0.0%	0.1%	0.0%	

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

	DESC	% RECEIVING DRUG OR DRUG CATEGORY				ALL PATIENTS
		AGE GROUP		SEX CATEGORY		
		UNDER 5	5 & OVER	MALE	FEMALE	
ANTIISTAMINICOS						
1013006 DIFENHIDRAMINA	DESC	3.3%	1.7%	3.3%	2.1%	2.7%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.03	0.02	0.03	0.02	0.03
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		1.2%	0.8%	1.3%	0.8%	1.0%
ANTIINFLAMATORIOS DE USO TOPICO						
1014006 ESTEROIDE DE USO TOPICO	TOP	0.4%	0.0%	0.0%	0.4%	0.2%
1014016 HIDROC.+NEOM.+POLIM.CR.	TOP	0.4%	0.3%	0.2%	0.4%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.00	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.1%	0.1%	0.3%	0.2%
ANTIMICOTICOS SISTEMICOS						
1016016 GRISEOFULVINA	DESC	0.0%	0.3%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.1%	0.0%	0.1%	0.0%
ANTIMICOYICOS DE ACCION LOCAL						
1017016 CLOTRIMAZOLE	TOP	0.9%	0.9%	0.2%	1.5%	0.9%
1017026 NISTATINA	DESC	0.5%	0.0%	0.5%	0.2%	0.3%
1017046 NISTATINA UNG.OFT.	OFT	0.2%	0.0%	0.2%	0.0%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.01	0.01	0.02	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.6%	0.4%	0.4%	0.7%	0.5%
ANTIPROTOZOARIOS						
1019036 METRONIDAZOL	DESC	33.8%	45.7%	35.9%	42.9%	39.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.34	0.46	0.36	0.43	0.40
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		12.8%	20.2%	13.8%	16.8%	15.4%
ANTITUBERCULOSOS						
1020056 PIRAZINAMIDA TAB	ORAL	0.2%	0.3%	0.0%	0.4%	0.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.1%	0.1%	0.0%	0.2%	0.1%
ASTRINGENTES						
1021016 CALAMINA FENOLADA	TOP	0.4%	0.3%	0.5%	0.2%	0.3%

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES; CESAMOS, CESARES, OUTPATIENT HOSPITAL
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.1%	0.1%	0.2%	0.1%	0.1%
BRONCODILADORES						
1022016 SALBUTAMOL	ORAL	0.9%	0.9%	0.9%	1.1%	1.0%
1022036 TEOFILINA	ORAL	1.3%	0.9%	0.9%	1.5%	1.2%
1022066 BRONDECON	ORAL	0.2%	0.0%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.02	0.02	0.03	0.02
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.9%	0.8%	0.7%	1.1%	0.9%
ESCABICIDAS Y PEDICULICIDAS						
1024006 GAMMA HEXACL.BENCENO LO	TOP	1.4%	0.3%	0.7%	1.3%	1.0%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.5%	0.1%	0.3%	0.5%	0.4%
EXPECTORANTES						
1027006 EXPECTORANTE INFANTIL	ORAL	0.2%	0.6%	0.5%	0.4%	0.4%
1027016 EXPECTORANTE ADULTO	ORAL	0.0%	0.6%	0.2%	0.2%	0.2%
1027026 BISOLVON SOL.OR.	ORAL	0.2%	0.0%	0.2%	0.0%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.01	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.1%	0.5%	0.4%	0.2%	0.3%
PROGESTAGENOS						
1034006 ACETATO MEDROXIPROG.TAB	ORAL	0.0%	0.3%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.1%	0.0%	0.1%	0.0%
SOL. ORAL CORREC., TRASTORNO HID						
1039006 SUERO REHIDRATAcion ORAL: SB	ORAL	62.9%	13.9%	48.0%	41.6%	45.0%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.63	0.14	0.48	0.42	0.45
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		23.9%	6.1%	18.4%	16.3%	17.4%
VITAMINAS Y MINERALES						
1044006 AC.ASCORBICO TAB	ORAL	0.2%	0.6%	0.2%	0.4%	0.3%
1044016 AC.FOLICO TAB	ORAL	0.7%	2.9%	1.9%	1.3%	1.6%
1044036 HEMATINICO VIT.	ORAL	7.1%	4.6%	7.6%	5.9%	6.7%
1044046 MULTIVITAMINAS	ORAL	6.0%	6.4%	5.9%	7.4%	6.7%
1044056 MULTIVIT. PRENATALES	ORAL	0.5%	0.9%	0.2%	1.3%	0.8%
1044066 SULFATO FERROSO	DESC	9.8%	19.7%	15.1%	14.2%	14.5%

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

	DESC	% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
1044096 VIT. "A"		1.3%	0.3%	1.2%	0.6%	0.9%
1044126 VIT. K1 SINTETICA INY	INY	0.0%	0.3%	0.0%	0.2%	0.1%
1044136 VIT. B1+B6+B12 INY	INY	0.2%	0.3%	0.5%	0.2%	0.3%
1044166 VIT. "C"	ORAL	0.2%	0.0%	0.2%	0.0%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.26	0.36	0.33	0.32	0.32
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		9.8%	15.9%	12.6%	12.3%	12.4%
ANTISEPTICOS						
1300026 YODO+POLIV.PIRROL.SOL.	TOP	0.0%	0.3%	0.0%	0.2%	0.1%
1300036 SAVLON ANTISEPTICO	TOP	0.2%	0.0%	0.2%	0.0%	0.1%
1300046 MANDELAMINA	ORAL	0.2%	0.0%	0.2%	0.0%	0.1%
1300106 MALIDIXINA, ACEITE DE	TOP	0.0%	0.3%	0.0%	0.2%	0.1%
1300116 VIOLETA GENTIANA SOL.	TOP	0.2%	0.0%	0.2%	0.0%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.01	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.2%	0.3%	0.3%	0.2%	0.2%
PRODUCTOS MISCELANEO						
1700066 COMBIASE	ORAL	0.0%	0.3%	0.0%	0.2%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.00	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.1%	0.0%	0.1%	0.0%
ANTIDIARREICOS						
1800006 ANTIDIARREICO	ORAL	0.2%	0.0%	0.0%	0.2%	0.1%
1800016 ANTIDIARR.CON NEOMYCIN	ORAL	0.0%	0.6%	0.2%	0.2%	0.2%
1800026 ANTIDIAR.CON KAOLIN-PEC	ORAL	0.5%	1.2%	0.5%	1.3%	0.9%
1800046 ANTIDIAR.CON NIFUROXIZ.	ORAL	0.0%	0.3%	0.2%	0.0%	0.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.02	0.01	0.02	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.9%	0.4%	0.7%	0.5%
TERAPEUTICA DESCONOCIDA						
ILEG ** ILEGIBLE NOMBRE **		0.4%	1.2%	0.9%	0.4%	0.8%
NOSE ** NO SE RECETO **		0.9%	0.3%	0.7%	0.6%	0.7%
OTRO ** OTROS LIQUIDOS **	ORAL	0.2%	0.3%	0.2%	0.2%	0.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.02	0.02	0.01	0.02
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.5%	0.8%	0.7%	0.5%	0.6%
TOTAL # OF PATIENTS TREATED:		553	346	423	473	901
TOTAL # OF DRUGS:		1,458	781	1,104	1,208	2,325
AVERAGE DRUGS PER PATIENT:		2.6	2.3	2.6	2.6	2.6

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**PRESCRIPTION FREQUENCY BY DRUG AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES; CESAMOS, CESARES, OUTPATIENT HOSPITAL.
DIAGNOSES OF ACUTE DIARRHEA WITH NO OTHER CONDITION**

		% RECEIVING DRUG OR DRUG CATEGORY					
		AGE GROUP		SEX CATEGORY		ALL PATIENTS	
		UNDER 5	5 & OVER	MALE	FEMALE		
ANALGESICOS: ANTIPIRETS. Y ANTIINFLAM.							
1000006	ACETAMINOFEN	DESC	7.4%	3.3%	6.4%	6.9%	6.9%
1000026	AC.ACETILSALICILICO	ORAL	5.0%	6.7%	5.1%	5.7%	5.3%
1000056	DIPIRONA	INY	0.8%	0.0%	0.6%	0.6%	0.6%
1000136	NONESTER.ANTIINFL.TAB	ORAL	0.0%	1.7%	0.0%	0.6%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.13	0.12	0.12	0.14	0.13
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			5.6%	4.9%	5.1%	5.7%	5.5%
ANALGESICOS DE USO TOPICO							
1002016	SALICILATO DE METILO	TOP	0.0%	1.7%	0.6%	0.0%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.00	0.02	0.01	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			0.0%	0.7%	0.3%	0.0%	0.1%
ANTIACIDOS Y ANTIULCEROSOS							
1003026	HIDRO.AL.Y MAGN.+DIMET.	ORAL	0.0%	3.3%	0.6%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.00	0.03	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			0.0%	1.4%	0.3%	0.0%	0.3%
ANTIBACTERIANOS							
1005026	AMPICILINA SUSP.ORAL	ORAL	5.0%	3.3%	5.7%	3.8%	4.7%
1005036	AMPICILINA	DESC	0.4%	6.7%	1.3%	1.9%	1.6%
1005106	CLURANFENICOL	DESC	0.4%	0.0%	0.6%	0.0%	0.3%
1005166	ERITROMICINA	DESC	3.9%	0.0%	4.5%	2.5%	3.4%
1005236	PENICILINA PROCAIN.INY	INY	0.4%	1.7%	0.6%	0.6%	0.6%
1005246	PENICILINA BENZATIN.INY	INY	2.3%	5.0%	1.3%	3.8%	2.8%
1005276	TRIMETO+SULFAMET	ORAL	34.5%	18.3%	33.8%	30.2%	31.6%
1005306	PIPERACILINA INY	INY	0.4%	1.7%	0.0%	1.3%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.47	0.37	0.48	0.44	0.46
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			20.1%	15.4%	20.2%	18.2%	19.1%
ANTIBACTERIANOS LOCALES							
1006016	GENTAMICINA GOT.OFT.	OFT	0.4%	0.0%	0.0%	0.6%	0.3%
1006056	SULFADIAZINA DE PLATA	TOP	0.0%	1.7%	0.0%	0.6%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.00	0.02	0.00	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			0.2%	0.7%	0.0%	0.5%	0.3%
ANTIEMETICOS							
1009026	MECLIZINA GOT.PED.	ORAL	5.4%	0.0%	2.5%	6.3%	4.4%
1009036	BONDOMOXINA GOT.	ORAL	5.4%	5.0%	6.4%	4.4%	5.3%

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**PRESCRIPTION FREQUENCY BY DRUG AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
DIAGNOSES OF ACUTE DIARRHEA WITH NO OTHER CONDITION**

1009056 DIMENHIDRANATA	DESC	% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
		0.8%	0.0%	0.0%	1.3%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.12	0.05	0.09	0.12	0.10
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		4.9%	2.1%	3.8%	4.9%	4.3%
ANTIESPASMODICOS						
1010006 ANTIESPAS.+ANALG.ADULTO	ORAL	0.8%	3.3%	1.9%	8.2%	5.0%
1010016 ANTIESPASM.INFANT.	ORAL	7.0%	5.0%	7.0%	6.9%	6.9%
1010026 ANTIESPASM.+ANALG.INY	INY	0.0%	3.3%	1.3%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.08	0.32	0.10	0.15	0.13
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		3.3%	3.3%	4.3%	6.3%	5.2%
ANTIHELINTICOS						
1011006 MEBENDAZOLE SUSP OR	ORAL	6.6%	11.0%	7.0%	7.5%	7.2%
1011016 MEBENDAZOLE TAB	ORAL	0.0%	1.3%	0.6%	3.1%	1.9%
1011026 NICLOSAMIDA TAB	ORAL	0.4%	1.0%	0.6%	0.0%	0.3%
1011036 PIPERAZINA CITR.	ORAL	7.8%	7.7%	7.0%	8.2%	7.5%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.15	0.25	0.15	0.19	0.17
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		6.3%	10.5%	6.5%	7.8%	7.1%
ANTIISTAMINICOS						
1013006 DIFENHIDRAMINA	DESC	1.6%	0.0%	1.9%	0.6%	1.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.00	0.02	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.7%	0.0%	0.8%	0.3%	0.5%
ANTIINFLAMATORIOS DE USO TOPICO						
1014006 ESTEROIDE DE USO TOPICO	TOP	0.4%	0.0%	0.0%	0.6%	0.3%
1014016 HIDROC.+NEOM.+POLIM.CR.	TOP	0.4%	0.0%	0.6%	0.0%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.0%	0.3%	0.3%	0.3%
ANTIMICOTICOS DE ACCION LOCAL						
1017026 NISTATINA	DESC	0.8%	0.0%	1.3%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.0%	0.5%	0.0%	0.3%
ANTIPROTOZOARIOS						
1019036 METRONIDAZOL	DESC	35.7%	58.3%	36.9%	44.0%	40.6%

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**PRESCRIPTION FREQUENCY BY DRUG AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
DIAGNOSES OF ACUTE DIARRHEA WITH NO OTHER CONDITION**

		% RECEIVING DRUG OR DRUG CATEGORY				ALL PATIENTS
		AGE GROUP		SEX CATEGORY		
		UNDER 5	5 & OVER	MALE	FEMALE	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.36	0.58	0.37	0.44	0.41
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		15.2%	24.5%	15.6%	18.2%	17.0%
ASTRINGENTES						
1021016 CALAMINA FENOLADA	TOP	0.4%	0.0%	0.6%	0.0%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.00	0.01	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.2%	0.0%	0.3%	0.0%	0.1%
BRONCODILADORES						
1022016 SALBUTAMOL	ORAL	0.8%	0.0%	1.3%	0.0%	0.6%
1022066 BRONDECON	ORAL	0.4%	0.0%	0.0%	0.6%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.5%	0.0%	0.5%	0.3%	0.4%
ESCABICIDAS Y PEDICULICIDAS						
1024006 GAMMA HEXACL.BENCENO LO	TOP	0.8%	0.0%	1.3%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.0%	0.5%	0.0%	0.3%
SOL. ORAL CORREC., TRASTORNO HID						
1039006 SUERO REHIDRATAACION ORAL: SB	ORAL	76.7%	36.7%	72.6%	67.3%	70.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.77	0.37	0.73	0.67	0.70
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		32.6%	15.4%	30.7%	27.9%	29.4%
VITAMINAS Y MINERALES						
1044006 AC.ASCORBICO TAB	ORAL	0.4%	1.7%	0.6%	0.6%	0.6%
1044016 AC.FOLICO TAB	ORAL	0.8%	0.0%	0.6%	0.6%	0.6%
1044036 HEMATINICO VIT.	ORAL	4.7%	1.7%	3.8%	4.4%	4.1%
1044046 MULTIVITAMINAS	ORAL	6.6%	3.3%	7.0%	5.7%	6.3%
1044056 MULTIVIT. PRENATALES	ORAL	0.4%	1.7%	0.0%	1.3%	0.6%
1044066 SULFATO FERROSO	DESC	6.2%	5.0%	5.7%	6.3%	5.9%
1044096 VIT. "A"	DESC	0.8%	0.0%	1.3%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.20	0.13	0.19	0.19	0.19
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		8.4%	5.6%	8.1%	7.8%	7.8%
ANTISEPTICOS						
1300106 NALIDIXINA, ACEITE DE	TOP	0.0%	1.7%	0.0%	0.6%	0.3%

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**PRESCRIPTION FREQUENCY BY DRUG AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
DIAGNOSES OF ACUTE DIARRHEA WITH NO OTHER CONDITION**

		% RECEIVING DRUG OR DRUG CATEGORY				ALL PATIENTS	
		AGE GROUP		SEX CATEGORY			
		UNDER 5	5 & OVER	MALE	FEMALE		
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.02	0.00	0.01	0.00	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.7%	0.0%	0.3%	0.1%	
ANTIDIARREICOS							
1800016	ANTIDIARR.CON NEOMYCIN	DRAL	0.0%	3.3%	0.6%	0.6%	0.6%
1800026	ANTIDIAR.CON KAOLIN-PEC	DRAL	0.8%	5.0%	1.3%	2.5%	1.9%
1800046	ANTIDIAR.CON NIFUROXIZ.	DRAL	0.0%	1.7%	0.6%	0.0%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.10	0.03	0.03	0.03	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	4.2%	1.1%	1.3%	1.2%	
TERAPEUTICA DESCONOCIDA							
ILEG	** ILEGIBLE NOMBRE **		0.8%	1.7%	1.3%	0.0%	0.9%
NOSE	** NO SE RECETO **		0.8%	0.0%	0.6%	0.6%	0.6%
OTRO	** OTROS LIQUIDOS **	ORAL	0.4%	0.0%	0.6%	0.0%	0.3%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.02	0.03	0.01	0.02	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.8%	0.7%	1.1%	0.3%	0.8%	
TOTAL # OF PATIENTS TREATED:		258	60	157	159	320	
TOTAL # OF DRUGS:		607	143	371	384	765	
AVERAGE DRUGS PER PATIENT:		2.4	2.4	2.4	2.4	2.4	

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
DIAGNOSES OF PARASITES WITH NO OTHER CONDITION**

		% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
ANALGESICOS: ANTIPIRETS. Y ANTIINFLAM.						
1000006 ACETAMINOFEN	DESC	8.1%	2.5%	4.3%	5.3%	4.8%
1000026 AC.ACETILSALICILICO	ORAL	1.2%	2.5%	1.7%	2.3%	2.0%
1000096 NAPROXEN TAB	ORAL	0.0%	0.6%	0.0%	0.8%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.09	0.06	0.06	0.08	0.07
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		4.0%	3.0%	2.7%	4.0%	3.4%
ANALGESICOS DE USO TOPICO						
1002006 ANTIPIR.+BENZ.+HIDROX.	TOP	1.2%	0.0%	0.9%	0.0%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.01	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.5%	0.0%	0.4%	0.0%	0.2%
ANTIACIDOS Y ANTIULCEROSOS						
1003026 HIDRO.AL.Y MAGN.+DIMET.	ORAL	0.0%	1.2%	1.7%	0.0%	0.8%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.01	0.02	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.7%	0.8%	0.0%	0.4%
ANTIBACTERIANOS						
1005006 AMIKACINA INY	INY	1.2%	0.0%	0.9%	0.0%	0.4%
1005026 AMPICILINA SUSP.ORAL	ORAL	1.2%	0.6%	0.0%	1.5%	0.8%
1005036 AMPICILINA	DESC	0.0%	1.2%	0.9%	0.8%	0.8%
1005106 CLORANFENICOL	DESC	1.2%	0.0%	0.9%	0.0%	0.4%
1005166 ERITROMICINA	DESC	3.5%	0.6%	0.9%	2.3%	1.6%
1005186 GENTAMICINA INY	INY	1.2%	0.0%	0.9%	0.0%	0.4%
1005246 PENICILINA BENZATIN.INY	INY	1.2%	2.5%	1.7%	2.3%	2.0%
1005256 TETRACICLINA CAP	ORAL	0.0%	1.2%	0.9%	0.8%	0.8%
1005276 TRIMETO+SULFAMET	ORAL	7.0%	2.5%	4.3%	4.6%	4.4%
1005306 PIPERACILINA INY	INY	1.2%	0.6%	0.0%	1.5%	0.8%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.17	0.09	0.11	0.14	0.13
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		7.5%	4.9%	5.0%	6.5%	5.8%
ANTIBACTERIANOS LOCALES						
1006026 OXITET.CLORHIDR.UN.OFT.	OFT	1.2%	0.0%	0.0%	0.8%	0.4%
1006086 WHITFIELD UNG.TOPIC.	TOP	1.2%	0.0%	0.9%	0.0%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.00	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		1.0%	0.0%	0.4%	0.4%	0.4%
ANTIEMETICOS						
1009006 METOCLOPRAMIDA	DESC	0.0%	0.6%	0.0%	0.8%	0.4%

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
DIAGNOSES OF PARASITES WITH NO OTHER CONDITION**

		% RECEIVING DRUG OR DRUG CATEGORY					ALL PATIENTS
		AGE GROUP		SEX CATEGORY			
		UNDER 5	5 & OVER	MALE	FEMALE		
1009026 MECLIZINA GOT.PED.	ORAL	3.5%	0.0%	1.7%	0.8%	1.2%	
1009036 BONODOXINA GOT.	ORAL	1.2%	0.6%	0.0%	1.5%	0.8%	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.05	0.01	0.02	0.03	0.02	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		2.0%	0.7%	0.8%	1.4%	1.1%	
ANTIESPASMODICOS							
1010006 ANTIESPAS.+ANALG.ADULTO	ORAL	1.2%	15.4%	11.1%	9.9%	10.5%	
1010016 ANTIESPASH.INFANT.	ORAL	7.0%	2.5%	1.7%	7.6%	4.8%	
1010026 ANTIESPASH.+ANALG.INY	INY	0.0%	0.6%	0.0%	0.8%	0.4%	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.08	0.19	0.13	0.18	0.16	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		3.5%	9.8%	5.7%	8.7%	7.3%	
ANTIHELMINTICOS							
1011006 MEBENDAZOLE SUSP OR	ORAL	27.9%	17.9%	29.9%	18.3%	23.8%	
1011016 MEBENDAZOLE TAB	ORAL	2.3%	19.8%	13.7%	14.5%	14.1%	
1011026 NICLOSAMIDA TAB	ORAL	1.2%	0.6%	0.9%	0.8%	0.8%	
1011036 PIPERAZINA C.I.T.R.	ORAL	43.0%	22.8%	32.5%	30.5%	31.5%	
1011056 ALBENDAZOLE TAB	ORAL	0.0%	0.6%	0.0%	0.8%	0.4%	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.74	0.62	0.77	0.65	0.71	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		31.8%	32.8%	34.5%	30.8%	32.6%	
ANTIHISTAMINICOS							
1013006 DIFENHIDRAMINA	DESC	2.3%	0.0%	1.7%	0.0%	0.8%	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.00	0.02	0.00	0.01	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		1.0%	0.0%	0.8%	0.0%	0.4%	
ANTIPROTOZOARIOS							
1019036 METRONIDAZOL	DESC	44.2%	42.6%	45.3%	45.0%	45.2%	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.44	0.43	0.45	0.45	0.45	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		18.9%	22.6%	20.3%	21.4%	20.9%	
ANTITUBERCULOSOS							
1020056 PIRAZINAMIDA TAB	ORAL	1.2%	0.6%	0.0%	1.5%	0.8%	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.01	0.00	0.02	0.01	
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.5%	0.3%	0.0%	0.7%	0.4%	
ESCABICIDAS Y PEDICULICIDAS							
1024006 GAMMA HEXACL.BENCENO LO	TOP	1.2%	0.0%	0.0%	0.8%	0.4%	

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
ALL METROPOLITAN FACILITIES: CESAMOS, CESARES, OUTPATIENT HOSPITAL
DIAGNOSES OF PARASITES WITH NO OTHER CONDITION**

		% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.00	0.01	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.5%	0.0%	0.0%	0.4%	0.2%
EXPECTORANTES						
1027016 EXPECTORANTE ADULTO	ORAL	0.0%	0.6%	0.9%	0.0%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.01	0.01	0.00	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.3%	0.4%	0.0%	0.2%
PROGESTAGENOS						
1034006 ACETATO MEDROXIPROG.TAB	ORAL	0.0%	0.6%	0.0%	0.8%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.01	0.00	0.01	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.3%	0.0%	0.4%	0.2%
SOL. ORAL CORREC., TRASTORNO HID						
1039006 SUERO REHIDRATAACION ORAL: SB	ORAL	20.9%	6.2%	10.3%	13.7%	12.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.21	0.06	0.10	0.14	0.12
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		9.0%	3.3%	4.6%	6.5%	5.6%
VITAMINAS Y MINERALES						
1044016 AC.FOLICO TAB	ORAL	1.2%	3.7%	3.4%	2.3%	2.8%
1044036 HEMATINICO VIT.	ORAL	10.5%	6.8%	12.0%	7.6%	9.7%
1044046 MULTIVITAMINAS	ORAL	4.7%	6.2%	5.1%	6.9%	6.0%
1044056 MULTIVIT. PRENATALES	ORAL	1.2%	0.6%	0.9%	1.5%	1.2%
1044066 SULFATO FERROSO	DESC	20.9%	20.4%	29.1%	15.3%	21.8%
1044096 VIT. "A"	DESC	3.5%	0.0%	0.0%	2.3%	1.2%
1044136 VIT. B1+B6+B12 INY	INY	1.2%	0.0%	0.9%	0.0%	0.4%
1044166 VIT. "C"	ORAL	1.2%	0.0%	0.9%	0.0%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.44	0.38	0.52	0.36	0.44
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		18.9%	20.0%	23.4%	17.0%	20.1%
PRODUCTOS MISCELANEO						
1700066 COMBIASE	ORAL	0.0%	0.6%	0.0%	0.8%	0.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.01	0.00	0.01	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	0.3%	0.0%	0.4%	0.2%
ANTIDIARREICOS						
1800026 ANTIDIAR.CON LAOLIN-PEC	ORAL	0.0%	0.6%	0.0%	0.8%	0.4%

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
 ALL METROPOLITAN FACILITIES: CESAMOS, CESARES; OUTPATIENT HOSPITAL
 DIAGNOSES OF PARASITES WITH NO OTHER CONDITION**

	AGE GROUP		% RECEIVING DRUG OR DRUG CATEGORY		ALL PATIENTS
	UNDER 5	5 & OVER	SEX CATEGORY MALE	FEMALE	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:	0.00	0.01	0.00	0.01	0.00
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:	0.0%	0.3%	0.0%	0.4%	0.2%
TERAPEUTICA DESCONOCIDA					
NOSE ** NO SE RECETO **	2.3%	0.6%	0.9%	1.5%	1.2%
OTRO ** OTROS LIQUIDOS **	0.0%	0.6%	0.0%	0.8%	0.4%
	ORAL				
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:	0.02	0.01	0.01	0.02	0.02
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:	1.0%	0.7%	0.4%	1.1%	0.7%
TOTAL # OF PATIENTS TREATED:	86	162	117	131	248
TOTAL # OF DRUGS:	201	305	261	276	537
AVERAGE DRUGS PER PATIENT:	2.3	1.9	2.2	2.1	2.2

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
HOSPITAL EMERGENCY ROOM AND INPATIENT EPISODES
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY					
		AGE GROUP		SEX CATEGORY		ALL PATIENTS	
		UNDER 5	5 & OVER	MALE	FEMALE		
ANALGESICOS: ANTIPIRETS. Y ANTIINFLAM.							
1000006	ACETAMINOFEN	DESC	13.1%	0.0%	10.6%	10.5%	10.6%
1000026	AC.ACETILSALICILICO	ORAL	0.8%	2.5%	2.1%	0.0%	1.2%
1000056	DIPIRONA	INY	0.8%	0.0%	1.1%	0.0%	0.6%
1000086	INDOMETACINA	DESC	0.0%	2.5%	0.0%	1.3%	0.6%
1000106	PREDNISONA TAB	ORAL	0.8%	0.0%	0.0%	1.3%	0.6%
1000116	HIDROCORT. INY	INY	0.0%	2.5%	0.0%	1.3%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.15	0.08	0.14	0.14	0.14
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			5.6%	3.0%	4.9%	5.4%	5.1%

ANTIACIDOS Y ANTIULCEROSOS

1003026	HIDRO.AL.Y MAGN.+DIMET.	ORAL	0.0%	2.5%	0.0%	1.3%	0.6%
1003046	RANITIDINA INY	INY	3.8%	0.0%	4.3%	1.3%	2.9%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.04	0.03	0.04	0.03	0.04
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			1.4%	1.0%	1.5%	1.0%	1.3%

ANTIBACTERIANOS

1005006	AMIKACINA INY	INY	7.7%	0.0%	7.4%	3.9%	5.9%
1005026	AMPICILINA SUSP.ORAL	ORAL	8.5%	0.0%	6.4%	6.6%	6.5%
1005036	AMPICILINA	DESC	11.5%	2.5%	10.6%	7.9%	9.4%
1005086	CEFALOSPOR. INY	INY	1.5%	0.0%	1.1%	1.3%	1.2%
1005106	CLORANFENICOL	DESC	2.3%	2.5%	3.2%	1.3%	2.4%
1005166	ERITROMICINA	DESC	0.8%	2.5%	1.1%	1.3%	1.2%
1005186	GENTAMICINA INY	INY	27.7%	17.5%	23.4%	27.6%	25.3%
1005216	PENICILINA CRISTAL. INY	INY	5.4%	5.0%	3.2%	7.9%	5.3%
1005246	PENICILINA BENZATIN. INY	INY	13.8%	2.5%	10.6%	13.2%	11.8%
1005276	TRIMETO+SULFAMET	ORAL	13.1%	30.0%	17.0%	17.1%	17.1%
1005336	OXACILINA TAB	ORAL	2.3%	0.0%	2.1%	1.3%	1.8%
1005346	DICLOXACILINA	DESC	0.8%	0.0%	0.0%	1.3%	0.6%
1005356	MEFOXIN	DESC	3.8%	7.5%	4.3%	5.3%	4.7%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.99	0.70	0.90	0.96	0.93
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			36.0%	28.3%	31.8%	36.1%	33.7%

ANTIBACTERIANOS LOCALES

1006016	GENTAMICINA GOT.OFT.	OFT	1.5%	0.0%	1.1%	1.3%	1.2%
1006026	OXITET.CLORHIDR. UN.OFT.	OFT	0.8%	0.0%	1.1%	0.0%	0.6%
1006066	CLORANFENICOL SOT.OFT.	OFT	2.3%	0.0%	3.2%	0.0%	1.8%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.05	0.00	0.05	0.01	0.04
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			1.7%	0.0%	1.9%	0.5%	1.3%

ANTICOAGULANTES Y SUS ANTAGONIST

**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
HOSPITAL EMERGENCY ROOM AND INPATIENT EPISODES
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
1007006 HEPARINA SODICA INY	INY	0.8%	0.0%	0.0%	1.3%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.01	0.00	0.00	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.3%	0.0%	0.0%	0.5%	0.2%
ANTICONVULSIVANTES						
1006016 DIAZEPAM INY	INY	1.5%	0.0%	1.1%	1.3%	1.2%
1008066 FENOBARBITAL TAB	ORAL	0.8%	0.0%	0.0%	1.3%	0.6%
1008096 SULFATO DE MAGNESIO	INY	0.0%	2.5%	1.1%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.02	0.03	0.02	0.03	0.02
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.8%	1.0%	0.7%	1.0%	0.9%
ANTIEMETICS						
1009006 METOCLOPRAMIDA	DESC	0.0%	2.5%	1.1%	0.0%	0.6%
1009036 BONODOXINA GOT.	ORAL	0.0%	2.5%	1.1%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.05	0.02	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	2.0%	0.7%	0.0%	0.4%
ANTIESPASMODICOS						
1010026 ANTIESPASM.+ANALG.INY	INY	0.0%	7.5%	1.1%	2.6%	1.8%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.08	0.01	0.03	0.02
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	3.0%	0.4%	1.0%	0.6%
ANTHELMINTICOS						
1011006 MEBENDAZOLE SUSP OR	ORAL	0.8%	5.0%	2.1%	2.6%	2.4%
1011016 MEBENDAZOLE TAB	ORAL	0.0%	10.0%	1.1%	3.9%	2.4%
1011036 PIPERAZINA CITR.	ORAL	4.6%	12.5%	8.5%	6.6%	7.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.05	0.28	0.12	0.13	0.12
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		2.0%	11.1%	4.1%	5.0%	4.5%
ANTIISTAMINICOS						
1013006 DIFENHIDRAMINA	DESC	0.0%	2.5%	0.0%	1.3%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.03	0.00	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	1.0%	0.0%	0.5%	0.2%
ANTIMICOTICOS SISTEMICOS						
1016036 KETOCONAZOL TAB	ORAL	0.0%	5.0%	1.1%	1.3%	1.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.05	0.01	0.01	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	2.0%	0.4%	0.5%	0.4%

**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
HOSPITAL EMERGENCY ROOM AND INPATIENT EPISODES
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY				ALL PATIENTS	
		AGE GROUP		SEX CATEGORY			
		UNDER 5	5 & OVER	MALE	FEMALE		
ANTIMICOTICOS DE ACCION LOCAL							
1017016	CLOTRIMAZOLE	TOP	0.8%	0.0%	0.0%	1.3%	0.6%
1017026	NISTATINA	DESC	6.2%	0.0%	5.3%	3.9%	4.7%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.07	0.00	0.05	0.05	0.05
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			2.5%	0.0%	1.9%	2.0%	1.9%
ANTIPROTOZOARIOS							
1019036	METRONIDAZOL	DESC	12.3%	20.0%	13.8%	15.8%	14.7%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.12	0.20	0.14	0.16	0.15
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			4.5%	8.1%	4.9%	5.9%	5.3%
BRONCODILADORES							
1022006	AMINOFILINA	INY	1.5%	0.0%	1.1%	1.3%	1.2%
1022016	SALBUTAMOL	ORAL	2.3%	0.0%	2.1%	1.3%	1.8%
1022036	TEOFILINA	ORAL	1.5%	0.0%	1.1%	1.3%	1.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.05	0.00	0.04	0.04	0.04
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			2.0%	0.0%	1.5%	1.5%	1.5%
ESCABICIDAS Y PEDICULICIDAS							
1024006	GAMMA HEXACL.BENCENO LD	TOP	0.8%	0.0%	1.1%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.01	0.00	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			0.3%	0.0%	0.4%	0.0%	0.2%
HIPNOTICOS Y SEDANTES							
1029036	DIAZEPAN TAB	ORAL	0.0%	2.5%	1.1%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.00	0.03	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			0.0%	1.0%	0.4%	0.0%	0.2%
LUBRICANTES							
1032016	PETROLATO SOLIDO	TOP	0.8%	0.0%	1.1%	0.0%	0.6%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:			0.01	0.00	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:			0.3%	0.0%	0.4%	0.0%	0.2%
PSICOTROPICOS							
1035076	IMIPRAMINA	DESC	0.0%	2.5%	1.1%	0.0%	0.6%

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**PRESCRIPTION FREQUENCY FOR DRUGS AND THERAPEUTIC CATEGORIES
HOSPITAL EMERGENCY ROOM AND INPATIENT EPISODES
ALL DIAGNOSES INDICATING DIARRHEA OR PARASITES**

		% RECEIVING DRUG OR DRUG CATEGORY				
		AGE GROUP		SEX CATEGORY		ALL PATIENTS
		UNDER 5	5 & OVER	MALE	FEMALE	
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.00	0.03	0.01	0.00	0.01
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		0.0%	1.0%	0.4%	0.0%	0.2%
SOL. ORAL CORREC., TRASTORNO HID						
1039006	SUERO REHIDRATACION ORAL: SB ORAL	62.3%	5.0%	50.0%	47.4%	48.8%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.62	0.05	0.50	0.47	0.49
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		22.6%	2.0%	17.6%	17.8%	17.7%
VITAMINAS Y MINERALES						
1044016	AC.FOLICO TAB ORAL	8.5%	15.0%	11.7%	10.5%	11.2%
1044026	AC.NICOTINICO TAB ORAL	0.0%	2.5%	1.1%	0.0%	0.6%
1044036	HEMATINICO VIT. ORAL	0.8%	0.0%	1.1%	0.0%	0.6%
1044046	MULTIVITAMINAS ORAL	1.5%	10.0%	5.3%	1.3%	3.5%
1044066	SULFATO FERROSO DESC	8.5%	10.0%	10.6%	9.2%	10.0%
1044096	VIT. "A" DESC	7.7%	2.5%	6.4%	7.9%	7.1%
1044126	VIT. K1 SINTETICA INY INY	3.1%	0.0%	1.1%	3.9%	2.4%
1044146	VIT. B1 (TIAMINA) INY INY	0.0%	5.0%	2.1%	0.0%	1.2%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.30	0.45	0.39	0.33	0.36
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		10.9%	18.2%	13.9%	12.4%	13.2%
SOL. CORRECT. DE TRASTORNOS HIDR						
1301016	BICARBONATO DE SODIO INY	1.5%	0.0%	2.1%	0.0%	1.2%
1301076	CLORURO DE POTASIO INY INY	0.0%	2.5%	1.1%	0.0%	0.6%
1301086	GLUCONATO DE CALCIO INY INY	6.2%	2.5%	7.4%	2.6%	5.3%
1301096	DEXT.EN AGUA IV	6.9%	17.5%	11.7%	6.6%	9.4%
1301186	DEXT.+CLORURO DE SODIO IV	3.1%	7.5%	5.3%	2.6%	4.1%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.18	0.30	0.28	0.12	0.21
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		6.4%	12.1%	9.7%	4.5%	7.5%
TERAPEUTICA DESCONOCIDA						
ILEG	** ILEGIBLE NOMBRE **	3.8%	5.0%	4.3%	3.9%	4.1%
NOSE	** NO SE RECETO **	1.5%	7.5%	2.1%	3.9%	2.9%
OTRO	** OTROS LIQUIDOS ** ORAL	2.3%	0.0%	1.1%	3.9%	2.4%
AVERAGE # OF DRUGS IN THIS CATEGORY PER CASE:		0.08	0.13	0.07	0.12	0.09
DRUGS IN THIS CATEGORY AS % OF ALL DRUGS:		2.8%	5.1%	2.6%	4.5%	3.4%
TOTAL # OF PATIENTS TREATED:		130	40	94	76	170
TOTAL # OF DRUGS:		358	99	267	202	469
AVERAGE DRUGS PER PATIENT:		2.6	2.5	2.8	2.7	2.8

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L. List of Pharmacies in the Tegucigalpa-Comayaguela Area
Compiled From the Farmacias de Turno

LISTADO DE FARMACIA CON SU DIRECCION RESPECTIVA.

Nº	FARMACIAS	DIRECCION
1	LIFE	AVE.CERVANTES, FTE CINE CLAMER, TEGUS
2	DELTA PEATONAL	CALLE PEATONAL, FTE SUPER DONAS, TEGUS
3	SAN MIGUEL # 1	4AVE, 6CALLE, BO.LOS DOLORES, TEGUS
4	IRIS	7AVE, 3CALLE, 1 CUADRA AL SUR DEL CINE LUX, COMAYAGUELA
5	LEO NAN # 1	7AVE, 3 Y 4 CALLE, COMAYAGUELA
6	R/x A FARMACIA	CENTRO COMERCIAL LEMPIRA, 9AVE, 14 CALLE, COMAYAGUELA
7	SUPREMA	1CALLE, CONTIGUO MERCADO ALVAREZ, COMAYAGUELA.
8	SANTA BARBARA	COSTADO NORTE PLAZA LOS DOLORES, TEGUS
9	MI CONFIANZA	COSTADO OESTE DEL ESTADIO NACIONAL, TEGUS
10	SANTA TERESA	FRENTE HOTEL PRADO, AVE. CERVANTES, TEGUS.
11	KRISTAL	BARRIO GUANACASTE, AVENIDA GUTENBERG, TEGUS.
12	AMERICA	5 AVE, 5 CALLE, COMAYAGUELA
13	COSMOS	AVE CENTENARIO, 14 CALLE, COMAYAGUELA
14	SAN BOSCO # 2	BOULEVAR DEL NORTE, 2AVE, COMAYAGUELA
15	REGIS	AVENIDA JEREZ, 6CALLE, Nº519, TEGUS
16	GUANACASTE	BARRIO GUANACASTE, TEGUS.
17	HELICA	BO.SAN PABLO, CALLE PRINCIPAL, # 5832, TEGUS
18	CENTENARIO	AVE,CENTENARIO, 4 Y 5 CALLE, COMAYAGUELA
19	DOMINGUEZ	4AVE, ENTRE 3 Y 4 CALLE, COMAYAGUELA
20	MANGUI	COL.LA GRANJA, 1/2CUADRA ABAJO DE SUC.BANCO DE OCCIDENTE, COMAYAGUELA
21	SANTA CRUZ	CUADRA Y MEDIA ANTES DEL DESVIO AL COUNTRY, COMAYAGUELA
22	LA GRANJA	BARRIO LA GRANJA, FRENTE AL CENTRO MEDICO HONDUREÑO, COMAYAGUELA
23	SANTA FE	BO.GUANACASTE, COSTADO OESTE DEL CINE PRESIDENTE, TEGUS.
24	VILLEDA MORALES	COSTADO NORTE DEL CINE VARIEDADES, TEGUS.
25	SAN ANGEL	AVE.LOS PROCERES, FRENTE HOSPITAL SAN FELIPE, TEGUS
26	EL SOL	FRENTE ENTRADA PRINCIPAL HOSPITAL ESCUELA, TEGUS
27	PROVIDENCIA	5AVE, 4CALLE, COMAYAGUELA
28	SN BOSCO # 3	BOULEVAR DEL NORTE, COL. TOROCAGUA, COMAYAGUELA.
29	REGIS PALMIRA	EDIF.11C.AVE.REP. DE PANAMA Y REP. DE CHILE, COL PALMIRA, TEGUS
30	LA PLAZUELA	2CALLE "B" 1226 CALLEJON CASTILLO BARAHONA TEGUS
31	ROSSNA	AVE PAZ BARAHONA, CALLE PEATONAL, # 609, TEGUS
32	HIBUERAS	5CALLE, ENTRE 4YSAVE, # 443, COMAYAGUELA
33	ECKERD	BARRIO VILLA ADELA, 6AVE, 18 CALLE, COMAYAGUELA
34	CONCEPCION	AVE. CENTENARIO, 12 Y 13 CALLE, COMAYAGUELA
35	SAN GABRIEL	7 AVE. 5 CALLE # 444, COMAYAGUELA.
36	EL CASTAÑO	COL. SAN CARLOS, FRENTE CLINICAS MEDICAS, TEGUS.
37	CATEDRAL	AVE. CERVANTES, EDIF. BANFINAN, LOCAL # 104, TEGUS
38	COON	COL. PALMIRA, EDIF.PAMEL, AVE. REP. DE CHILE, TEGUS
39	FRANCELIA	FRENTE A RIVERA Y CIA, TEGUS
40	UNIVERSAL	5 AVE. ENTRE 3 Y 4 CALLE, TEGUS
41	VIDA	3 AVE. ENTRE 7 Y 8 CALLE, COMAYAGUELA
42	SAN RAMON	COL. SANTA FE, 1 CUADRA ANTES. OESTE MERCADO MAYOREO, COMAYAGUELA

LISTADO DE FARMACIA CON SU DIRECCION RESPECTIVA.

43	ITALIANA	AVE MAXIMO JEREZ, # 806, TEGUS
44	PAREDES	4CALLE, # 308, AVE. PAZ BARAHONA, BO.LA PLAZUELA TEGUS.
45	JEHOVA ES MI REFUGIO	ESQUINA OPUESTA DEL MINISTERIO DE SALUD PUBLICA, TEGUS.
46	SANTA EDUVIGES	BO.VILLA ADELA, 22 CALLE, COMAYAGUELA
47	MONTERREY	5AVE, ENTRE 9 Y 10 CALLE, COMAYAGUELA
48	LOURDES	7AVE, ENTRE 1 Y 2 CALLE, COMAYAGUELA
49	LA CATOLICA	5 Y 6 AVE, 4 CALLE, COMAYAGUELA
50	SAN RAFAEL	AVENIDA COLON, FRENTE AL TELEGRAFO, TEGUS.
51	MAYA	FRENTE CLINICAS VIERA, TEGUS
52	GENESIS	3AVE, BO.GUADALUPE, TEGUS
53	DELTA CENTRO	FRENTE AL PARQUE CENTRAL, TEGUS
54	NORMAL	4AVE, 3CALLE, COMAYAGUELA
55	MIRTY	MERCADO ZONAL BELEN, COMAYAGUELA
56	SAN JORGE	5AVE, ENTRE 6 Y 7 CALLE, COMAYAGUELA
57	PAVONE	BO.ABAJO, AVE MORALES, # 527, TEGUS
58	MONTIEL INTERNACIONAL	EDIFICIO FIALLOS SOTO, LOCAL # 101, TEGUS
59	GINA	CALLE PEATONAL LOS DOLORES, # 1216, TEGUS
60	LA PAZ	AVE. LA PAZ, FRENTE A TECNIMOTORES, TEGUS
61	SAN BASILIO	CONTIGUO EMPRESA EL REY, FRENTE HOTEL TICAMAYA, COMAYAGUELA
62	MARIA AUXILIADORA	AVE CENTENARIO, 1 Y 2 CALLE, COMAYAGUELA
63	MORALES	3AVE 12 CALLE, ESQUINA OPUESTA PARQUE EL OBELISCO, COMAYAGUELA
64	TORRES FIALLOS	FRENTE LA MERCED, TEGUS
65	SANTA ANA	BOULEVAR SUYAPA, CONTIGUO MATERNO INFANTIL, TEGUS
66	PARIS	CENTRO COMERCIAL LOS CASTAÑOS, TEGUS
67	ELITE	BO. SAN RAFAEL, EDIF. SAN ANTONIO, TEGUS
68	LA LIBERTAD	3AVE. 7 Y 8 CALLE, FRENTE POLICLINICA, COMAYAGUELA
69	EL PUEBLO	5AVE. ENTRE 3 Y 4 CALLE, COMAYAGUELA
70	LA FAMILIA	BLVD.DEL NORTE, FTE. ENTRADA PRINC. MERCADO ZONAL BELEN, COMAYAGUELA
71	HONDURAS	AVE.JEREZ CASA 1039, BO.LA RONDA, TEGUS
72	KARNEL	COSTADO SUR PLAZA LOS DOLORES, TEGUS
73	SILKO	EDIFICIO CLINICAS MEDICAS, COL. SAN CARLOS, TEGUS
74	MI FARMACIA	BO.ABAJO, LA CONCORDIA, 1 CUADRA AL NORTE PARQUE HERRERA, TEGUS
75	SUYAPA	5AVE, FRENTE AL PARQUE COLON, COMAYAGUELA
76	RICHARD	6AVE, ENTRE 4 Y 5 CALLE, COMAYAGUELA
77	IMPERIAL	3CALLE, ENTRE 4 Y 5 AVE, COMAYAGUELA
78	TAMEN	BO.GUADALUPE, ENTRE LLANTICAR Y SHELL, # 107, 4AVE. TEGUS
79	SAN JUAN	EDIF.METROPOLITANO, CONTIGUO HOSPITAL VIERA, TEGUS
80	SAN CARLOS	AVE.CERVANTES, AL OESTE DEL CINE CLAMER, TEGUS
81	KEMUEL	BARRIO BELLAVISTA, COMAYAGUELA
82	SARAI	COUNTRY CLUB, CALLE PRINCIPAL, 17 AVE, COMAYAGUELA
83	SANTA ISABEL	4AVE, # 925, COMAYAGUELA
84	FRATERNIDAD	4AVE, 7CALLE, COMAYAGUELA
85	PAZ	AVE.CERVANTES, FTE.HOTEL LA RONDA, TEGUS

LISTADO DE FARMACIA CON SU DIRECCION RESPECTIVA.

86	GRAMERKA	BO. GUANACASTE, AVE. GUTENBERG, TEGUS
87	SAN LUCAS	BO. EL JAZMIN, 5 CALLE, # 691, TEGUS
88	CENTRO AMERICA	CALLE PRINCIPAL, COL. ALAMEDA, CONTIGUO ASHONPLAFA, #2002, TEG
89	GALENIA	COSTADO SUR PUENTE CARIAS, COMAYAGUELA
90	LEO NAN # 2	MERCADO ZONAL BELEN, COMAYAGUELA
91	QUINTA AVENIDA	SAVE, ENTRE 5 Y 6 CALLE, COMAYAGUELA
92	ARLIS	MEDIA CUADRA AL ESTE DEL CINE CLAMER, TEGUS
93	LA SALUD	COSTADO NORTE DEL PARQUE HERRERA, TEGUS
94	FLEFIL	9 CALLE, 6 Y 7 AVE, COMAYAGUELA
95	SAN BOSCO # 1	FRENTE AL PARQUE LA LIBERTAD, COMAYAGUELA
96	GLORYS	7 Y 8 AVE. 12 CALLE, COMAYAGUELA
97	SUFARMA	6 AVE, 5 Y 6 CALLE, # 506, COMAYAGUELA
98	EMMANUEL	COL. SANTA FE, BLVD. CARRETERA DEL NORTE, CALLE PRINCIPAL # 2863, COM.
99	DIVEL	PLANTA BAJA DEL EDIFICIO MARICHAL, TEGUS
100	ANA KARINA	BO. SAN RAFAEL, CASA DE SALUD EL CARMEN, TEGUS
101	ESPIRITU SANTO	BO. LA PLAZUELA, FTE. AL ARBOLITO, TEGUS
102	CRUZ ROJA	SAVE. CALLE LEMPIRA, BO. LOS DOLORES, TEGUS
103	LEITZELAR	3 AVE, ENTRE 9 Y 10 CALLE, #917, COMAYAGUELA
104	SAN ISIDRO	3 CALLE, ENTRE 5 Y 6 AVE, COMAYAGUELA
105	LOUMAR	BO. CONCEPCION, 1 CALLE, 6 Y 7 AVE, 1/2 CUADRA SUPER. MIRNA, COMAYAGUELA
106	EL CARMEN	EDIFICIO M Y M, 1 CUADRA DEL HOSPITAL MATERNO INFANTIL, TEGUS.
107	LAS LOMAS	AVE. LA PAZ, COM. LOS ARCOS, CONTIGUO GAS. TEXACO GUANACASTE, TEGUS.
108	SAN PABLO	1 CUADRA ANTES DEL MERCADO SAN PABLO, BO. EL MANCHEN, TEGUS
109	POPULAR	5 CALLE, ESQUINA ORIENTE CLINICAS VIERA, TEGUS.
110	REGIS MALLOL	1 CALLE, 3 AVE, FTE. MINISTERIO EDUCACION PUBLICA, COMAYAGUELA
111	COLON	1 CALLE, ENTRE 5 Y 6 AVE, FTE. PLAZA COLON, COMAYAGUELA
112	SAN GERARDO	13 CALLE, ENTRE 4 Y 5 AVE, FTE. A BANADESA, COMAYAGUELA.
113	MONTIELMAR	COL. KENNEDY
114	COLONIAL	COL. KENNEDY
115	ROALVA	COL. KENNEDY, BLOQUE 2, GRUPO 21, ZONA 2
116	SANTA LUCIA	COL. KENNEDY, 1A ENTRADA
117	SAN LUIS	COL. KENNEDY
118	KENNEDY	COL. KENNEDY
119	JESUS DE LA BUENA ESPERANZA	COL. KENNEDY, FRENTE SUC. BANCO ATLANTIDA
120	MIRAFLORES	COL. MIRAFLORES
121	SAN MIGUEL # 2	PLAZA MIRAFLORES
122	GUADALUPE	COL. MIRAFLORES, AVE. STA CRISTINA, TERMINAL DE BUSES
123	ORIENTAL	COL. BELLA ORIENTE
124	LA TRINIDAD	COL. EL HOGAR
125	MAYO	COL. EL PRADO, FRENTE A SYRE
126	SAN FRANCISCO	COL. HATO DE ENMEDIO
127	UNION	COL. HATO DE ENMEDIO, SECTOR 10, LOCAL 4
128	MOSELO	LOCAL HATO DE ENMEDIO

LISTADO DE FARMACIA CON SU DIRECCION RESPECTIVA.

129	LINDAL	COL. HATO DE ENMEDIO
130	CLAUVES	COL. MIRAMONTES, CALLE PRINCIPAL # 2116, CENTRO COMERCIAL MIRAMONTES
131	SAN ANTONIO DE PADUA	CENTRO COMERCIAL CENTRO AMERICA, TEGUS
132	ELIZABETH	CENTRO COMERCIAL PERISUR, COMAYAGUELA
133	LOS LLANOS	COL. SAN JOSE DE LOS LLANOS, TEGUS
134	PAMELA	COLONIA SAN MIGUEL, TEGUS
135	REGIS LOARQUE	CENTRO COMERCIAL LOARQUE, COMAYAGUELA
136	REGIS AEROPUERTO	SUPERMERCADO LA COLONIA # 2, CARRETERA AL BATALLON, COMAYAGUELA
137	TILOARQUE	COL. TILOARQUE, COMAYAGUELA
138	TONCONTIN	COL. SAN LUIS COMAYAGUELA
139	MAGISTRAL	COLONIA SATELITE, COMAYAGUELA
140	SUANYFAR	COL. SATELITE, GRILLAS DE LA CARRETERA O'CONDUCE AL SUR DEL PAIS.
141	SAN MARTIN	COL. SATELITE, 2DA CALLE, 4 AVE. BLOQUE LL-30, 1 CUADRA AL NORTE.
142	SATELITE	COL. SATELITE, BLOQUE W, CASA 12
143	CERRO GRANDE	COL. CERRO GRANDE, CARRETERA A OLANCHO, ZONA 4 B-3, # 25
144	DIANA	COL. CERRO GRANDE, COMAYAGUELA
145	SANTA MARIA DEL TEPEYAC	CENTRO COMERCIAL LOMAS DEL BOULEVAR
146	EL PARAISO	ZONA 2, CERRO GRANDE, COMAYAGUELA
147	D'NAYO	COL. LAS COLINAS, ENTRE AUTO-POLLOS AL CARBON Y HELADOS RAINBOW.
148	EBEN-EZER	RESIDENCIAL CENTRO AMERICA BLOQUE B, CASA 26
149	MICHELLE	COL. CENTRO AMERICA DESTE
150	DORIS	COL. EL PEDREGAL, COMAYAGUELA
151	SANTA MARIA	COL. SAN JOSE DE LA VEGA, COMAYAGUELA
152	LOARQUE	COL. LOARQUE, COMAYAGUELA
153	LOS ROBLES	COL. LOS ROBLES, COMAYAGUELA
154	DEL PILAR	COLONIA AURORA, TEGUS.
155	SAN FRANCISCO DE ASIS	ALDEA SUYAPA

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M. Details of the Scenario Used by Enumerators During Pharmacy Visits

SCENARIO FOR HONDURAS SIMULATED PURCHASE SURVEY

SCENARIO: An assessor will present him or herself as the parent of a two-year old male child who has had a number of watery bowel movements for two days. Care should be taken to assure that the assessor uses local terms that idiomatically describe diarrhea. The assessor will ask the person who waits on him or her for advice about what products are best to treat this condition. Other than these facts, no information will be presented unless asked for by the shop attendant.

If the shop attendant asks questions, the assessor will provide the following information:

Child's condition: The child should be described as somewhat tired, with moderate stomach discomfort, but with no fever or vomiting.

Bowel movements: If specific information is requested, the bowel movements will be further described as approximately 5-6 small, watery, non-bloody stools per day.

Unusual foods or drugs consumed: If asked whether the child has eaten anything unusual, the assessor should reply that the child has eaten as usual for the past few days, and if asked, the assessor should inform the attendant that the child has not taken any drugs that might cause diarrhea.

Current feeding practices: The assessor will respond that the child is continuing to be fed and given liquids as normal. However, he has not had much of an appetite, so has eaten very little food.

How much the assessor can pay for drugs: The assessor should purchase all medicines recommended, unless the shop attendant asks how much the assessor is willing to pay for medicines. In that case, the "low-income" assessor should state that he or she can only afford to pay 25-30 lempira, while the "middle-income" assessor can only afford to pay 50-60 lempira. [These were determined to be typical prices paid for medicines by people in these income categories.]

ACTIONS: It is important that the assessor remembers any questions that the shop attendant asks before making a recommendation, any discussion of ability to pay, any advice given about the products recommended, and also any other advice about how to treat the diarrhea episode.

Any products that are recommended should be purchased in the quantities offered.

After leaving the store, it is important that all information be recorded as soon as possible on the simulated purchase information sheets by the assessors.

N. Pharmacy Study Data Collection Form

HONDURAS SIMULATED PURCHASE SURVEY

Assessor Name: _____ Date: _____

Outlet Name: _____ Type: _____

1. Which of the following did the shop attendant ask about before making a treatment recommendation?

Frequency of stools	_____	Drugs taken	_____
Blood in stool	_____	Fluids taken	_____
Presence of fever	_____	Foods taken	_____
Weakness/lethargy	_____	Other (describe below)	_____
Vomiting	_____	None	_____
Stomach pains	_____		

DESCRIBE OTHER: _____

2. Which products were recommended and purchased? Write 'NONE' if none were recommended.

BRAND NAME	NUMBER OF UNITS	PRICE
a. _____	_____	_____
b. _____	_____	_____
c. _____	_____	_____
d. _____	_____	_____
e. _____	_____	_____

3. What explanations were given about the drugs purchased?

Description of drugs	_____	How to mix ORS	_____
Cautions, side effects	_____	Other (Describe below)	_____
How to take drugs	_____	None	_____

DESCRIBE 'OTHER': _____

4. Which of the following did the shop attendant discuss?

Amount customer could pay	_____	Continue/increase fluids	_____
Visit a doctor:		Continue foods	_____
if diarrhea persists	_____	Any mention of fluid loss	_____
if child vomits	_____	Other (Describe below)	_____
if child has fever	_____	None	_____

DESCRIBE 'OTHER': _____

5. Describe the following about this encounter:

# of attendants in outlet	_____	Rate helpfulness of attendant:	
# of customers in outlet	_____	0= not at all 1= a little	
# of minutes with attendant	_____	2= moderately 3= very	_____

0. Comments on the Interactions Between Drug Sellers and Enumerators Selected from the Data Collection Forms

DRUG SELLERS BEHAVIOR

* ENUMERATORS COLLECTED DATA ON THREE ASPECTS OF DRUG SELLERS BEHAVIOR:

- QUESTIONS ASKED ABOUT THE CHILD'S DIARRHEA
- EXPLANATIONS GIVEN ABOUT THE DRUGS SOLD
- OTHER SPONTANEOUSLY MENTIONED TOPICS

PHARM.	COMMENTS
122	"IF THE CHILD HAS STOMACH PAIN, IT IS BECAUSE THE DIARRHEA IS DUE TO PARASITIC INFESTATION".
141	DON'T GIVE MILK OR ORANGE FOR 24 HOURS, GIVE AN APPLE.
142	PUT THE CHILD ON DIET WITH RICE WATER AND GIVE ORS.
123	THIS DRUG HAS ANTIBIOTIC IN CASE OF INFECTION.
14	DID YOU VISIT A PHYSICIAN? IT IS BETTER IF YOU WANT TO KNOW THE CAUSE OF THE DIARRHEA.
152	THROW AWAY THE ORS. IN CASE THAT YOU DON'T USE IT WITHIN 24 HOURS.
81	DOES THE CHILD HAVE PARASITES?
111	DOES THE DIARRHEA SMELL BAD? FETID? WHAT COLOR IS IT?
80	A CHILD WITH 2 DAYS OF DIARRHEA COULD HAVE DEHYDRATION. IT IS BETTER TO VISIT A PHYSICIAN. (DID NOT RECEIVE TREATMENT).
63	DON'T GIVE STRONG FOOD. GIVE RICE WATER. BOIL WATER AND GIVE MASHED POTATOES.
95	DID YOU VISIT A PHYSICIAN?. (NO PRESCRIPTION)
25	GIVE LIQUIDS AND A LOT OF ORS.
18	SEE A DOCTOR IF DIARRHEA PERSISTS. STOP THE DRUG IN CASE THE DIARRHEA ENDS.
33	APART FROM DIARRHEA. DOES HE HAVE ANYTHING ELSE?
134	DOES HE HAVE WORMS?. WAS HE SICK BEFORE? MAKE A LAB TEST TO KNOW.
68	THE PECTIN STOPS THE INFECTION. AND CUT OFF THE DIARRHEA. GIVE PEDIALYTE FOR 24 HOURS. IF HE VOMITS . GIVE CHAMOMILLA TEA.
14	BRING URGENTLY THE CHILD TO A PHYSICIAN. HE COULD DIE FROM DEHYDRATION. YOU MUST KNOW THE CAUSE. (NO PRESCRIPTION GIVEN)
76	"GIVE LEMON WATER TO THE CHILD".
2	WE DON'T HAVE DRUGS FOR CHILDREN. (NO PRESCRIPTION)
45	NO EXPLANATION AND NO PRESCRIPTION GIVEN.
122	IS THE CHILD IN RURAL OR URBAN AREA? (NO PRESCRIPTION GIVEN).
98	"GIVE THE DRUG UNTIL THE DIARRHEA ENDS".
155	WE DON'T SELL DRUGS WITHOUT PRESCRIPTION. BECAUSE THERE ARE A LOT OF DRUGS.
115	WHY DON'T YOU VISIT A PHYSICIAN? (PRESCRIPTION WAS ORS AND ANTIBIOTIC .
10	IT IS BETTER TO VISIT THE PHYSICIAN. SOLD PEDIALYTE.
140	GIVE ORS WHEN HE IS THIRSTY. NO MILK. PRESCRIPTION.
100	"GIVE LIQUIDS TO PREVENT DEHYDRATION".

125

P. List of Drug Products Sold During the Pharmacy Stud

CLASE TERAPEUTICO CODIGO	INGREDIENTE	MONDRE Y CONCENTRACION	COSTE
18.00 100527B	SULFAMETOX & TRIMETOPRIM	SULHEPRIM: 60ML: FC	7.13
18.00 100527D	SULFAMETOX & TRIMETOPRIM	ALFA-PRIM: 120ML: FC	11.00
10.19 100527E	SULFAMETOX & TRIMETOPRIM	ANDIPRIN: 120ML: FC	9.75
18.00 100527F	SULFAMETROL & TRIMETHOPRIM	LIDAPRIM: 50ML: FC	13.55
18.00 101101B	MEBENDAZOL	HELI-6: 6TAB: CJ	3.75
10.44 101106	ALBENDAZOL	HELI2: 20ML: FC	8.00
18.00 101903A	METRONIDAZOL	FLAGYL: 120ML: FC	24.00
18.00 101903B	METRONIDAZOL	AMAGYL: 120ML: FC	12.50
18.00 101903C	METRONIDAZOL	CICLOMB: 120ML: FC	8.00
10.19 103900B	ELECTROLITOS EN POLVO	SUERO ORAL: 28GR: SB	4.35
10.39 103901A	ELECTROLITOS EN LIQUIDO	PEDIALYTE: 400ML: FC	10.40
18.00 103901B	ELECTROLITOS EN LIQUIDO	ORALECTRIL 800 ML: 800ML: FC	10.00
18.00 103901C	ELECTROLITOS EN LIQUIDO	ORALECTRIL 600 ML: 400ML: FC	6.80
18.00 103901D	ELECTROLITOS EN LIQUIDO	LITODEX: FC	12.00
10.19 104403A	VITAMINAS A,C & D	AQUASOL ACD: 15ML: FC	3.75
18.00 104403B	VITAMINAS EN POLVO	DXTROVITA: 25GR: SB	0.60
18.00 104403C	VITAMINAS EN POLVO	SUERO ORAL VITAMINADO: 4GR: PQ	2.21
10.11 180001A	NEOMIC, SULFAGUA & KAOLIN	SULPECTIL: 120ML: FC	10.50
10.11 180001B	NEOMIC, SULFA & KAOLIN	NROPEC-K: 120ML: FC	12.50
18.00 180001C	KAOLIN, PECTINA & NEOMICINA	CAOLIN PECTINA + NEOMICINA: 120ML:	4.45
18.00 180001D	NEOMIC, SULFAGUA, & KAOLIN	BACTERIOTAL: 60ML: FC	7.50
18.00 180001E	NEOMICINA & KAOLIN	KAOLAN CON NEOMICINA: 60ML: FC	5.44
18.00 180001F	NEOMICINA & KAOLIN	KAOMYCIN: 59ML: FC	17.84
18.00 180001H	NEOMICINA & KAOLIN	KAOMYCIN: 120ML: FC	35.60
18.00 180001I	NEOMICIN, PURAZOL & KAOLIN	TREDA: 75ML: FC	14.55
18.00 180001J	NEOMININ & KAOLIN	ACROMAXPECTIN: 100ML: FC	13.50
18.00 180002A	KAOLIN & PECTINA	INFANTPECTIN: 120ML: FC	10.23
18.00 180002B	KAOLIN & PECTINA	KAOLAN: 120ML: FC	7.71
18.00 180002C	KAOLIN & PECTINA	CAOLIN PECTINA: 120ML: FC	4.05
10.39 180002D	KAOLIN & PECTINA	STOP: 120ML: FC	5.50
18.00 180002E	KAOLIN & PECTINA	MIXTURA: 120ML: FC	3.75
18.00 180002F	KAOLIN & PECTATE	KAPECTATE: 171ML: FC	20.14
10.39 180002H	KAOLIN & PECTATE	KAOPCCON: 180ML: FC	22.00
10.39 180002I	KAOLIN & PECTATE	ANTIIDIARRIEICO CONCENTRADO: FC	4.61
10.39 180003A	STREPO, SULFAGUA & KAOLIN	INTESTICORT: 60ML: FC	9.25
18.00 180003B	STREPTO, KAOLIN & PECTINA	STREPTOMAGMA: 90ML: FC	21.90
18.00 180003C	STREPTO, SULFADIMA & KAOLIN	ESTREPOPECTINA: 60ML: FC	13.75
10.39 180003D	STREPTO, SULFATIA & PECTIN	ESTREPTOENTEROL: 60ML: FC	16.45
10.39 180004A	NIFUROX & KAOLIN	KAOFUROL: 60ML: FC	9.13
18.00 180004B	NIFUROXIZADA	ESKAPAR: 90ML: FC	23.60
18.00 180005A	HIDROXIQUIN & KAOLIN	GASTROLEINA: 120ML: FC	7.50
18.00 180006A	SULF DE AMINOSIDINA	GABRRORAL: 60ML: FC	23.00

Q List of Persons Who Attended Debriefing at Honduras Ministry
of Health, 14/05/91

ANNEX Q

DEBRIEFING MEETING FOR THE MINISTRY OF HEALTH
May 14 th.1991

LIST OF PARTICIPANTS

Dr. Fernando Coto, Special Advisor to the Minister
Dr. Alvaro Gonzales Marmol, Chief, MCH Division
Dra. Mirta Ponce, Chief, Women Care Dpt., MCH Division
Dr. Jorge Melendez, Chief, CED/IRA, Child Care Dpt., MCH Division
Lic. M.Rosa Bonnano, Technical Assistant, CED Program, MCH Division
Dra. Desirée Pastor, Chief, PAI, Child Care Dpt., MCH Division
Dr. Heladio Ucles, Director, Metropolitan Region
Lic. Leticia Castillo, MCH Technician, Metropolitan Region
Dr. Marco Bográn, Director, Hospital Escuela, Tegucigalpa
Dra. Estella Aguilar, Drug Unit, MOH
Lic. Peter Cross, Chief of Party, MSH/Honduras
Dr. Vincent David, MCH Advisor, MSH/Honduras