Prevention and Control of Priority Communicable Diseases in South America (PCPCD)

CLOSING REPORT / JULY 2011







Canadian International Development Agency Agence canadienne de développement international

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Canadian International Development Agency Agence canadienne de développement international PAHO HQ Library Cataloguing-in-Publication

Pan American Health Organization

" Prevention and Control of Priority Communicable Diseases in South America (PCPCD)"

Washington, D.C.: PAHO, © 2011

ISBN: 978-92-75-13225-8

I. Title

- 1. COMMUNICABLE DISEASE CONTROL standards
- 2. COMMUNICABLE DISEASE PREVENTION
- 3. EVALUATION OF RESULTS OF PREVENTIVE ACTIONS
- 4. EPIDEMIOLOGIC STUDIES
- 5. DIAGNOSIS OF HEALTH SITUATION
- 6. HEALTH STATUS INDICATORS
- 7. SOUTH AMERICA

NLM WA 110.DA4

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The Project was undertaken with financial support from the Government of Canada through the Canadian International Development Agency (CIDA).

Acknowledgements

The successful results of this Project would not have been possible without the contribution and continual support of the participating PAHO country offices in Colombia, Ecuador, Paraguay and Peru involved in its implementation, and the PAHO regional advisors for Chagas disease, dengue, integrated management of child health and tuberculosis. We would like to acknowledge the support of the Ministries of Health in each country, the departmental and local authorities, and the members of the target communities of the Project who actively participated in the planning, implementation and monitoring of activities. We would also like to thank the Canadian International Development Agency for their recognition of the need to continually monitor and adjust the Project to ensure it remained relevant to meet the local priorities in each country.

Prepared by:

Dionne Patz



Acronyms

| AFEME | Ecuadoran Association of Medical Schools | |
|----------|---|--|
| CIDA | Canadian International Development Agency | |
| ASEDEFE | Ecuadoran Association of Nursing Schools | |
| COMBI | Communication for behavioral impact (dengue) | |
| DOTS | Directly Observed Treatment Strategy | |
| FCH | Family and Community Health | |
| GDR | Gender, Diversity and Human Rights | |
| GFATM | Global Fund | |
| HIV/AIDS | Human immunodeficiency virus/acquired immunodeficiency syndrome | |
| HSD | Health Surveillance, Disease Prevention and Control | |
| HSS | Health Systems based on Primary Health Care | |
| ICATT | IMCI Computerized Adaptation and Training Tool | |
| IMCI | Integrated Management of Childhood Illnesses | |
| PAHO | Pan American Health Organization | |
| PCPCD | Prevention and Control of Priority Communicable Diseases in South America (the Project) | |
| STI | Sexually transmitted infections | |
| ТВ | Tuberculosis | |
| ТСС | Technical cooperation between countries | |
| VDRL | Venereal Diseases Research Laboratory (syphilis test) | |
| | | |



Project Description/ Summary

In 2002, the Canadian International Development Agency (CIDA) approved funding for a Program to be executed by the Pan American Health Organization (PAHO) on the prevention and control of communicable diseases in South America, which aimed at closing health gaps in specific priority population groups in the Region. The Program, the Prevention and Control of Priority Communicable Diseases in South America (PCPCD), was initially approved for CAD\$ 10,000,000 for a six year period, beginning in September 2002.

The **goal** of the PCPCD is to contribute to the reduction of morbidity, mortality and disability from those communicable diseases that are responsible for the greatest burden of morbidity and mortality among populations in Colombia, Ecuador, Paraguay, Peru, and Venezuela. These diseases included: sexually transmitted infections (STIs), tuberculosis, Chagas disease, dengue, and prevalent childhood illnesses. The Program also included a cross-cutting component on gender equality and one on human resources development.

The **objective** of the PCPCD is to strengthen the capacity of national institutions responsible for planning, managing and providing sustainable, integrated and gender sensitive programs to prevent and control the most prevalent communicable diseases that cause the greatest number of deaths and disability. It would do so by complementing the current activities for the prevention and control of communicable diseases in the participating countries with the aim to close the gaps of the national programs, emphasizing the most vulnerable and marginalized populations, such as indigenous populations and prisoners.

The programming and optimal use of funding was determined by conducting a joint pre project assessment visit with CIDA and PAHO to the potential beneficiary countries. During this visit, the Program's expected results were stipulated by the national authorities of the participating countries and the geographic areas of work defined. Since the Program included seven components, five of which correspond to the major disease groups targeted, and two which deal with cross-cutting elements, the expected results were grouped under those components, namely: tuberculosis, Chagas disease, dengue, sexually transmitted infections and HIV/AIDS, prevalent childhood illnesses, human resources development, and gender equality (refer to Annex A for original LFA). Not all themes would be addressed in each country. The human resources development component was formally included in the PCPCD only for prevalent childhood illnesses, as a way to contribute to the sustainability of the activities under the strategy. By mid 2007, the PCPCD underwent three major changes as a result of assessments of its implementation. The first simplified its structure by reducing the number of expected results and indicators, and improved its management by results. In November 2003, it was agreed that funding would be discontinued for those components that had received resources from the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) and for others whose execution or progress had been unsatisfactory. Thus, funding was eliminated for the HIV/STI component in Colombia (November 2003) and Ecuador (March 2004); for tuberculosis in Ecuador (March 2005), Paraguay (March 2005), and Peru (March 2004); and, for indigenous populations in Venezuela (November 2003). In this last country, PCPCD activities were suspended due to various factors that made execution very difficult, among them staff turnover, program delays, and reformulation of the work program. In countries whose proposals to GFATM had been approved, Program resources sustained the activities during a period of transition until the GFATM financing was received.

The second change, in December 2004, responded to administrative difficulties with the cooperation modality originally agreed to by CIDA and PAHO, which consisted of a letter of understanding that did not allow the Program to receive the annual programmed funds. At this time, the two institutions agreed to operate under a grant modality, which facilitated the disbursement of funds, and, consequently, the advance of the activities (refer to Financial Summary).

The third change was made in March 2006, following the recommendations from the mid-term evaluation of the Program in Paraguay and Peru. The PCPCD was expanded to include activities in community IMCI in the participating countries and to formalize a component for an integrated health program in Boquerón, Paraguay. For this last component, a specific expected result and indicators were developed. The Program's IMCI and STI components were expanded to additional geographical areas in Paraguay, and the Chagas disease component was also expanded in Peru.

In 2009, based on the PCPCD's successful results, in particular during fiscal years 2006 to 2007 and 2007 to 2008, CIDA approved a two and a half year extension of the Program, which included additional funding to consolidate and expand its results and to strengthen actions that would contribute to the sustainability of those results. In total, the PCPCD received CAD\$ 11,996,773, or US\$ 10,313,924 for just over an eight year period with programmed activities beginning in October 2002, and ending in February 2011.

CIDA and PAHO Programmatic Linkages

The structure of the PCPCD complements CIDA priorities and health objectives, sustainable development and gender equality, since the purpose of the Program is to reduce morbidity and mortality among vulnerable and at risk populations groups, such as women, children, indigenous populations, and the poor. It is also part of the logical framework of CIDA development programming in the participating countries and the Agency's strategy for the Americas, which is *to close the gaps* in equity. The Program also complements PAHO's Work Program and conforms to the objectives and expected results contained in the 2002 to 2007 and 2007 to 2012 Biennial Program Budgets. The PCPCD was also designed to contribute to the achievement of Millennium Development Goals 3, 4, 5, and 6 related to gender equality, infant mortality, maternal health, and HIV, malaria, and other diseases, respectively.

The following are the specific Strategic Objectives of PAHO's Strategic Plan that the PCPCD supports:

Strategic Objective 1: To reduce the health, social and economic burden of communicable diseases.

- RER 1.3: Member States supported through technical cooperation to provide access for all populations to interventions for the prevention, control and elimination of neglected communicable diseases, including zoonotic diseases.
- RER 1.7: Member States and the international community equipped to detect, contain and effectively respond to major epidemic and pandemic prone diseases (e.g. influenza, dengue, meningitis, yellow fever, hemorrhagic fevers, plaque and smallpox).

Strategic Objective 2: To combat HIV/AIDS, tuberculosis and malaria.

 RER 2.1: Member States supported through technical cooperation for the prevention of, and treatment, support and care for patients with HIV/aids, tuberculosis and malaria including innovative approaches for increasing coverage of the interventions among poor people, hard to reach and vulnerable populations.

Strategic Objective 4: To reduce morbidity and mortality and improve health during the key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence, and improve sexual and reproductive health and promote active and healthy aging for all individuals.

 RER 4.5: Member States supported through technical cooperation to improve child health and development taking into consideration international agreements. Strategic Objective 7: To address the underlying social and economic determinants of health through policies and programs that enhance health equity and integrate pro-poor, gender responsive and human rights based approaches.

- RER 7.5: Gender analysis and responsive actions incorporated into PAHO/WHO's normative work and technical cooperation provided to Member States for formulation of gender sensitive policies and programs.
- RER 7.6: Member States supported through technical cooperation to develop policies, plans and programs that apply an intercultural approach based on primary health care and that seek to establish strategic alliances with relevant stakeholders and partners to improve the health and well-being of indigenous peoples.





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Results Achieved

As part of its iterative nature and recommendations from its continual monitoring and evaluation, the results and indicators of the PCPCD have been modified several times. During the annual work planning sessions with the countries, and incorporating the recommendations of the monitoring reports, the decisions were made to expand actions to new geographic areas using a select set of criteria. This led to the introduction of new targets to measure the achievement of indicators in these areas.

The criteria for expansion included:

- Evidence of achieved results in current project sites
- Political commitment from authorities in the areas of proposed expansion
- Epidemiological profile that justifies the expansion
- Analysis of human resources necessary for the expansion

The most significant change in the Program results and indicators occurred as a result of the mid term evaluation carried out in February 2006. Based on its recommendations, several results and indicators were either removed or modified to improve the measurement of actual results, and to reflect better the area of work of the interventions (national, regional or local).

In addition, the mid term evaluation recommended the expansion of several components of the PCPCD in terms of geographic coverage, which led to the establishment of new targets for several indicators, and the incorporation of a new component in Paraguay, the integrated health program in the department of Boquerón.

Based on the health needs and priorities identified as part of the routine monitoring and supervision of the Program, two new components were added in 2007: the IMCI component in Colombia, and the Chagas disease component in Ecuador.

Finally, as part of the consolidation and continuation of the PCPCD for the period 2009 to 2011, programming was expanded to incorporate new geographic areas in all participating countries.¹

¹ The extension includes fiscal year 2009 to 2010 (Year 8) and fiscal year 2010 to 2011 (Year 9).



Planned and Achieved Results

As of fiscal year 2009 to 2010, the PCPCD had a total of 26 expected results and 48 indicators. Of these, 21 results and 22 indicators correspond to those that were originally in the Program's logical framework in 2002. Of those, 20 planned results were either fully met or 91% achieved. As part of the modifications that have been made to the Program throughout its execution, 25 new indicators were introduced based on the recommendations made during the mid term evaluation and as part of the expansion of programming to include new geographic areas and components.

Analyzing the total number of planned results and indicators, the Program has obtained an overall achievement of 88% of its planned results. Table 1 provides an overview of the progress of the planned results and indicators. Indicators in green are those where the intended targets were not met at the end of the Program. Table 2 shows the actual targets achieved versus those that were planned for these indicators (pages 22 to 23).

Table 1: Progress of the Program Expected Results and Indicators by Country and Component.

| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------|--|-----------|---|
| COL | IMCI | ER. 1 An integrated approach to care that incorporates key practices with social actors has been strengthened in the Departments of Guajira (municipality of Dibulla), Cesar (municipality of Pueblo Bello), Guaviare (Barracón), Amazonas (Puerto Nariño), Nariño (El Diviso), Sierra Nevada and Vichada | 1.1 | Proportion of professionals trained in clinical IMCI and TB that apply the instruments in accordance with national norms in the health services in the project areas (target = 50%) |
| | | | 1.2 | Proportion of social actors who actively participate in the promotion of key practices for community IMCI (target = 60%) |
| | | ER. 2 IMCI has been incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the target areas | 2.1 | The criteria and lines of action for the incorporation of IMCI into universities in Colombia have been defined |

| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------|--|-----------|--|
| | ТВ | ER. 1 DOTS strategy will have been implemented among the indigenous population of the departments of Amazonas, Cesar, Guainía, Guajira, Guaviare, Magdalena, Nariño, Santa Marta and Vichada using a community participation model | 1.1 | Proportion of registered cases that receive directly observed treatment and are directly supervised of all identified cases (targets = 100% for treatment and 75% for supervision) |
| | | | 1.2 | Departments have complete and reliable epidemiological data for TB available by age and sex and treatment and program activities are evaluated |
| | | | 1.3 | Proportion of cases that receive treatment supervised by community members (target = 80%) |
| | | | 1.4 | The detection rate for respiratory symptoms by health institutions (target=5%) |
| | IVM | ER. 1 An integrated approach to prevent and control vector borne diseases, childhood illnesses and TB within the Healthy Environment Strategy has been developed in target departments | 1.1 | Strengthen and consolidate the integration of strategies for the prevention and control of vector-borne diseases, tuberculosis, and the improvement of the quality of care of children and pregnant women |
| ECU | CHAGAS | ER. 1 Epidemiological and entomological surveillance has been strengthened with community participation and intersectoral coordination in the provinces of El Oro, Guayas, Loja and Manabí | 1.1 | Percentage of communities (cantons) in the project areas of high risk with a system of surveillance established and functioning with community participation and an intersectoral focus |
| | IMCI | ER. 1 Regulatory, material and logistical conditions necessary to apply the IMCI strategy will have been created in target areas | 1.1 | Proportion of health services that have the technical and normative materials available, based on official recommendations of the Ministry of Health, to apply the IMCI strategy in the project areas (target=100%) |

| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------|---|-----------|--|
| | | ER. 2 Neonatal component of IMCI has been implemented in the five priority provinces | 2.1 | Proportion of health services that provide neonatal care that apply the IMCI strategy in the project areas (target=100%) |
| | | ER. 3 Population of children under 5 years of age have access to quality IMCI care in the community, outpatient services and reference hospitals through the implementation both clinical and community IMCI in the five priority provinces | 3.1 | Proportion of districts in project areas that carry out at least one participatory community diagnosis and have an annual plan of action to strengthen actions in community IMCI (target=100%) |
| | | | 3.2 | Proportion of districts in project areas that have a dedicated person (leader) for community IMCI actions (target=100%) |
| | | ER. 4 IMCI has been accepted and incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the target areas | 4.1 | Number of health sciences schools that have incorporated IMCI into their curricula and show signs of institutionalization of the Strategy (target=8) |
| PAR | CHAGAS | ER. 1 A surveillance system to measure and monitor infestation by triatomines has been implemented with community participation | 1.1 | Number of regional technical surveillance teams established and trained in the project areas (target=3) |
| | | | 1.2 | Number of reports of the presence of triatomines by the community, community leaders and schools received at notification centers followed up by the sectors of SENEPA |
| | | | 1.3 | Proportion of trained community leaders that actively participate in surveillance in risk areas (target =100%) |
| | | | 1.4 | Proportion of schools in risk areas that participate in Chagas week (target=50%) |

(Continued)

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| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------|---|-----------|---|
| | | | 1.5 | Epidemiological and entomological surveillance system established in the Central Chaco |
| | | | 1.6 | Percentage of newborns diagnosed with Chagas disease <i>(T. cruzi)</i> that receive clinical, epidemiological and serological follow up (target=100%) |
| | IMCI | ER. 1 Regulatory, material and logistical conditions necessary to apply the IMCI strategy will have been created in target areas | 1.1 | Proportion of health services that have the technical and normative materials available, based on official recommendations of the Ministry of Health, to apply the IMCI strategy in the project areas (target=100%) |
| | | ER. 2 Children under 5 years of age living in the peripheral areas of Asunción and the Departments of Boquerón, Caazapá, Central, Itapúa, San Pedro and Presidente Hayes will have benefited from IMCI at the end of the PCPCD | 2.1 | Proportion of public health services applying the IMCI strategy in the target areas (target=100%) |
| | | | 2.2 | Proportion of health services in project areas that have at least one person trained in clinical AIEPI that treat children under five years of age, that receive at least one supervisory visit per year |
| | | | 2.3 | Proportion of districts in project areas that have at least one participatory community diagnosis with an annual plan of action that includes activities and budget to strengthen community IMCI |
| | | | 2.4 | Proportion of districts in project areas that have at least one person to lead actions in community IMCI |

| | | | | | - |
|----------|------------------------|---------------------|-------------------|---------------|------------|
| Table 1 | Progress of the Progra | am Expected Results | and Indicators by | v Country and | Component |
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| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|---------------------------------|---|-----------|--|
| | | ER. 3 IMCI has been accepted and incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the target areas | 3.1 | Number of health sciences schools that have incorporated IMCI into their academic curricula (target = 12) |
| | INTEGRATED HEALTH PROGRAM | ER. 1 An integrated primary health care program with a multicultural and equity focus has been implemented in the communities of the Department of Boquerón in the Paraguayan Chaco | 1.1 | Proportion of health services professionals at the local level that provide comprehensive care with a multicultural focus (target = 80%) |
| | | | 1.2 | Centre established for the training of local technicians to provide health care with an intercultural focus |
| | | | 1.3 | Proportion of health services with an established health information system that use it for local programming purposes (target = 50%) |
| | | | 1.4 | Proportion of communities and villages that participate in the planning of health actions (target = 50%) |
| | STI | ER. 1 STI program management strengthened, and the approach to prevent and control STIs expanded with an emphasis on congenital syphilis and gender issues | 1.1 | Proportion of health units in each sanitary health region that are implementing the syndromic management approach (target = 95%) |
| | | | 1.2 | Proportion of health providers trained in STI prevention and control in the project areas that diagnose and treat men and women according to established standards (target = 100%) |
| | | ER. 2 The coverage of the diagnosis and treatment of syphilis in pregnant women and newborns has increased | 2.1 | Proportion of pregnant women attending prenatal care services that receive a VDRL test (target = 100%) |

| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------|--|-----------|---|
| | | | 2.2 | Proportion of pregnant women with positive serology for syphilis that receive treatment according to established norms (target = 100%) |
| | | | 2.3 | Proportion of reported cases of syphilis in pregnant women (prevalence) |
| | | | 2.4 | Incidence of congenital syphilis |
| | | | 2.5 | Number of peripheral labs that conduct syphilis testing with quality control |
| | | ER. 3 The STI surveillance system has been strengthened and incorporates second generation surveillance activities which include behavioural, gender and sociodemographic factors | 3.1 | Epidemiological data on STIs are available by behavioural and sociodemographic factors, including age and sex, for decision making and resource planning at all levels (central, regional and local) |
| PER | CHAGAS | ER. 1 The vector has been eliminated in disinsected dwellings and peri-domiciliary area, and a post spraying entomological surveillance system has been installed with the participation of men and women of the departments of Arequipa, Moquegua and Tacna | 1.1 | Proportion of dwellings disinsected at the end of the Project (target = 100%: in Arequipa: N= 40,000; in Moquegua: N=21,000; in Tacna: N=1,500) |
| | | ER. 2 The presence of the transmission of <i>T. cruzi</i> has been verified in the departments of Apurimac, Ayacucho and Ica | 2.1 | A serological base line for children 0 to 5 years of age established |
| | IMCI | ER. 1 Regulatory, material and logistical conditions necessary to apply the IMCI strategy have been created in the target provinces (Apurimac, Cusco and Huancavelica) | 1.1 | Proportion of health services that have the technical and normative materials available, based on official recommendations of the Ministry of Health, to apply the IMCI strategy in the project areas (target=100%) |

| Table 1: | Progress of the | Program | Expected | Results and | Indicators | bv | Country an | d Component. |
|----------|------------------------|---------|----------|--------------------|------------|----|------------|--------------|
| | | | | | | | | |

| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------|---|-----------|--|
| | | ER. 2 Target area health services (Apurimac, Cusco and Huancavelica) that serve children under 5 years of age apply the IMCI strategy | 2.1 | Proportion of health facilities in the project areas that are applying the IMCI strategy (target=100%) |
| | | | 2.2 | Proportion of districts in project areas that have at least one participatory community diagnosis with an annual plan of action that includes activities and budget to strengthen community IMCI |
| | | | 2.3 | Proportion of districts in project areas that have at least one person to lead actions in community IMCI |
| | | ER. 3 IMCI has been accepted and incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the target areas | 3.1 | Number of health sciences schools that have incorporated IMCI in the academic curriculum (N=17) |
| | | ER. 4 System for monitoring and supervising IMCI structured and operational | 4.1 | Proportion of health services in project areas, that have at least one person trained in clinical IMCI that treat children under 5 years of age, that receive at minimum one supervisory visit per year (target =100%) |
| REG | DENGUE | ER. 1 The national capacity in the target countries to respond to dengue has been improved through the implementation of the national Integrated Management Strategy (IMS) for Dengue | 1.1 | Number of national teams with the knowledge to contain dengue implementing actions in accordance with the dengue IMS (target=3) |
| | | | 1.2 | Number of countries that adopt the strategy and begin implementation (target=3) |
| | | | 1.3 | Number of countries with social communication plans for the prevention and control of dengue implemented at the local level (target =3) |

| COUNTRY | COMPONENT | EXPECTED RESULT | INDICATOR | DESCRIPTION |
|---------|-----------------------|--|-----------|--|
| | | | 1.4 | Number of countries with strengthened surveillance systems in areas of risk (target=3) |
| | IMCI | ER. 1 Technical support has been provided to the participating countries including the introduction of IMCI into the curriculum of health sciences schools in the target areas | 1.1 | Number of technical visits and actions to support the implementation of PCPCD activities |
| | | | 1.2 | Proportion of academic institutions involved in the PCPCD that have introduced the IMCI strategy (target = 80%; N=15) |
| | PROJECT MANAGEMENT | ER. 1 The PCPCD has been properly managed, supported and evaluated throughout its lifetime | 1.1 | Completeness and timeliness of work plans, technical and financial reports by PAHO to CIDA in accordance with the Grant Arrangement |
| | | | 1.2 | Number of supervisory visits to monitor the execution of Program components in accordance with expected results and indicators (target= 3 per year) |



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Table 2. Description of the Program Indicators not met by Country and Component.

| COUNTRY | COMPONENT | INDICATOR | DESCRIPTION | TARGET | МЕТ | REMARKS |
|---------|-----------|-----------|---|--------|-----|---|
| COL | IMCI | 1.2 | Proportion of social actors who actively participate in the promotion of key practices for community IMCI (target = 60%) | 60 | 45 | Introduced in 2007. Intercultural focus required more planning time than originally anticipated |
| PAR | CHAGAS | 1.3 | Proportion of trained community leaders that actively participate in surveillance in risk areas (target =100%) | 100 | 77 | Original targets were met in 2008. The project was expanded to the Central Chaco in 2009 |
| | IMCI | 2.3 | Proportion of districts in project areas that have at least one participatory community diagnosis with an annual plan of action that includes activities and budget to strengthen community IMCI (target = 100%) | 100 | 63 | Introduced in 2006. It may have been useful not to have set these targets at 100% |
| | | 2.4 | Proportion of districts in project areas that have at least one person to lead actions in community IMCI (target = 100%) | 100 | 63 | Introduced in 2006. It may have been useful not to have set these targets at 100% |
| | STI | 2.1 | Proportion of pregnant women attending prenatal care services that receive a VDRL test (target = 100%) | 100 | 87 | Coverage has improved but testing is still not routine as part of prenatal consultations |
| | | 2.2 | Proportion of pregnant women with positive serology for syphilis that receive treatment according to established norms (target = 100%) | 100 | 82 | Coverage has improved but all infected women are not receiving treatment as it is not enforced, and health professionals are still apprehensive of providing treatment due to potential side effects |

| COUNTRY COMPONENT IND | | INDICATOR | DESCRIPTION | TARGET | МЕТ | REMARKS | |
|-----------------------|--------|-----------|--|------------------------------|-----|--|--|
| PER | CHAGAS | 2.1 | A serological base line for children 0 to 5 years of age established | Baseline in 3 departments | NA | Postponed due to lack of project funds: will be carried out starting in May 2011 with other funding | |
| | IMCI | 2.2 | Proportion of districts in project areas that have at least one participatory community diagnosis with an annual plan of action that includes activities and budget to strengthen community IMCI (target = 100%) | 100 | 84 | Introduced in 2006. It may have been useful not to have set these targets at 100% | |
| | | 4.1 | Proportion of health services in project areas, that have at least one person trained in clinical IMCI that treat children under 5 years of age, that receive at minimum one supervisory visit per year (target =100%) | 100 | 61 | Insufficient resources (human and financial) to provide supervision to all project sites (180 health services) | |

Table 2. Description of the Program Indicators not met by Country and Component.

With the exception of the STI component in Paraguay (indicators 2.1 and 2.2) and the IMCI component in Peru (indicator 4.1), those results that were not met pertain to the community IMCI component that was introduced as part of the Program expansion in 2006 and 2007. For the STI component in Paraguay, significant advances were made in improving and expanding the coverage of diagnosis and treatment of syphilis in pregnant women in the Program areas; however the intended target of 100% for each was not met.

The PCPCD achieved the majority of the actions proposed in its extension in 2009, except for the serological baseline study in children under five years of age for Chagas disease in the remaining Southern departments in Peru (indicator 2.1 above). This was due to insufficient Program funds available to carry out the study. Nonetheless, the study will be conducted beginning in May 2011 with national and regional resources, and integrated with the IMCI strategy.

As previously mentioned, the PCPCD has been expanded in each of its components. Table 3

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illustrates the coverage of the Program in each of the countries by component at the level of department or province. The PCPCD has successfully achieved a scaling up of its actions in Colombia, Ecuador (IMCI strategy), Paraguay (dengue) and Peru (IMCI strategy) to reach national coverage. In Paraguay, the STI component is being used as the model for national expansion.

| Table 3: Coverage of Program Actions by Component and Cou |
|---|
|---|

| PERCENTAGE OF COVERAGE OF PCPCD ACTIONS | | | | | | | | | | | | |
|---|--|---------|---------|-------------------|-----------|---------|--|--|--|--|--|--|
| COUNTRY | COUNTRY TOTAL NUMBER OF DEPARTMENTS/ REGIONS/ PROVINCES | | ТВ | CHAGAS DISEASE | DENGUE | STI | | | | | | |
| Colombia | 36 | 5(14%) | 8 (22%) | 2(0.6%) | | | | | | | | |
| Ecuador | 24 | 10(42%) | | 4 (17%) | | | | | | | | |
| Paraguay | 18 | 7 (39%) | | 9 (50%) | 18 (100%) | 8 (44%) | | | | | | |
| Peru | 25 | 3 (12%) | | 3 (12%) | 6 (24%) | | | | | | | |



Throughout its implementation, the PCPCD experienced a number of challenges, which largely were a result of administrative issues that impacted the timely execution of its programming.

For the first three fiscal years (2002 to 2005), there were delays in receiving the funding, which made it impossible to implement fully the work plans until fiscal year 2005 to 2006 (Year 4). This situation was resolved in October 2005, when the legal agreement of the PCPCD was changed from a contribution arrangement to a grant arrangement. This led to a significant increase in the rate program and budget execution, as shown in the Section on Financial Summary.

As part of the management strategy of the PCPCD, continual efforts were made to address the aforementioned issues and solve them with PAHO Country Representative Offices and Ministries of Health in the participating countries. In some cases the solution meant moving the administrative management of funding to the regional/departmental level, and the planning of budgets from the central to the local levels, and improving communications among all stakeholders at all levels of the process.

In addition, the efficient and effective use of resources was promoted through the use of a results based management model with the countries and annual programming to ensure the PCPCD was aligned with country priorities. Beginning in 2005, systematic country monitoring visits were carried out on an annual basis to identify local priorities, challenges with program implementation, required technical support for the successful execution of activities, and any modifications to the programming, if required.

In terms of risks, the major risk throughout the lifespan of the PCPCD has been the changes in personnel in the participating countries due to democratic/electoral changes, which led to changes in government and consequently in the Ministries of Health. The immediate impact seen was changes in national staff associated with the Program that delayed the capacity to implement activities at the country level. To mitigate this risk, a strategy was put in place to have national PAHO personnel as the individuals responsible for the Program at country level. This ensured direct contact with between the PAHO Regional Office and the local level as well as ongoing communication and feedback on progress and challenges faced with the implementation of programming at the local level. In addition, country monitoring visits were used as a strategy to meet with Ministries of Health at all levels when new national authorities were established. The purpose of said meetings was to present the Program, its objectives and results; to review national commitments established and achievements to date, and to advocate for its continued support and sustainability.

Specific events that impacted the overall execution of activities included dengue and yellow fever outbreaks in Paraguay in 2007 and 2008, and the influenza H1N1 2009 pandemic, which involved national counterparts across program areas. Response to the pandemic was the priority of country offices and Ministries of Health for several months.

In Year 8, there was a delay in implementation due to a delay in the approval of the PCPCD extension, which was not received until five months into the fiscal year (August 2009). This created uncertainty regarding the continuation of the Program and led to new activities and expansion to new areas being put on hold until approval process was completed.

Specific results

For the community IMCI results, success in reaching interventions is more difficult to assess and quantify, such as behavior change, and follow up at the family and community levels present challenges in terms of the time, travel and human resources required. In addition, working with indigenous peoples required a more significant investment of time than originally anticipated to ensure that the approaches were culturally appropriate and involved the participation and validation by community members.

For the IMCI result pertaining to the monitoring and supervision of health services in Peru, one of the main challenges faced was the lack of resources (financial and human) in the Ministry of Health to travel systematically to the Program sites to monitor actions and strengthen the capacity at the district levels and to cover the 180 health services involved. This was addressed by the Program supporting an individual to travel to the project sites to work with the departmental and district level personnel to develop local capacity; however it was not possible to supervise each health service involved in the Program, and the final target achieved was 62%.

In Paraguay, significant achievements were made in improving the coverage of the diagnosis and treatment of syphilis in pregnant women, achieving overall targets 87% and 82%, respectively. This was the maximum result possible given the social and cultural factors encountered during the implementation of the Program. At the beginning of the PCPCD, one of the main challenges was the lack of the consistent availability of diagnostic tests and treatment for syphilis in the health services.

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This made it impossible to guarantee that every pregnant woman in the project sites would receive testing and treatment or they may receive testing but due to the lack of drugs they would not be treated. This issue began to be resolved in August 2005 with the passing of Ministerial Resolution 693 to ensure that all pregnant women and their partners would receive free testing and treatment for syphilis, which was a direct result of advocacy provided through PCPCD actions. In addition, specific indicators for syphilis were included as part of the Ministry of Public Health and Wellbeing management control indicators that the Central level carries out in all departments.

With the availability of treatment, a resistance of health providers to treat pregnant women with penicillin due to its potential side effects became the new challenge. The Program provided education to health providers to try to alleviate these concerns, and also supported the development of guidelines for the treatment of syphilis in pregnant women, but this remains an issue in the country and will hinder the country's goal to eliminate congenital syphilis.

Unintended Program Results

Overall the PCPCD has obtained a significant number of unintended results, or results that are in addition to those planned in its logical framework analysis. These are in large part due to the strong political support the Program has received throughout its execution, its flexibility to adapt to and address local priorities in participating countries and to expand its actions based on successful results, and the collaborations established at country level to support its implementation. The following are a list of overall unintended results that were achieved during its implementation:

Overall Results:

- Increased visibility of public health actions, many of which address problems pertaining to neglected diseases (Chagas disease, congenital syphilis, and dengue).
- Successfully promoted, and achieved, a multisectoral approach in the prevention and control of communicable diseases, as well as in dealing with them in an integrated manner at the regional and local levels.
- Strengthened human resources capacity for disease management, planning and monitoring at the regional and local levels.
- Facilitated an intercultural approach to community disease prevention and control through the integration of program activities in primary health care services, and fostering dialogue with indigenous peoples to address/abridge traditional and western approaches to medicine.



- Generated a high degree of community participation, including local authorities, in its
 execution to increase the potential for sustainability of actions and achievements. This
 is especially true in the prevention of reinfestation related to Chagas disease, and in
 tuberculosis for active case finding and treatment supervision.
- Regional approach has optimized resources available, harmonized actions and led to a sharing of ideas and experiences among countries of the Region (beyond those included in the PCPCD). For example, with Central American countries in Chagas disease and in child health.
- Promoted a cost-effective use of financial and human resources by integrating training and supervision activities related to different issues and coordinating work with other institutions, NGOs, and the Global Fund in Paraguay.
- Use of a results-based management model has resulted in resource allocation based on efficiency in financial management and effectiveness in achieving the indicators.
- Achieved national support to institutionalize IMCI as the official strategy to strengthen child health care in all countries.
- Resulted in the interruption of vector-borne transmission *T. cruzi* (Chagas disease) in Moquegua and Tacna, Peru, and the Eastern Region of Paraguay.
- Positioned the theme of tuberculosis on the public health agenda as a priority among indigenous peoples in Colombia, which led to national funding from the Ministry of Social Protection.
- Actions opened dialogue to work in the prevention and control of other diseases (such as malaria) and other priority themes (nutrition and human rights).
- Prepared countries to apply and successfully receive funding from other sources, such as the Global Fund for TB and HIV/AIDS in Ecuador and Paraguay.
- Contributed to the achievement of the Millennium Development Goals and the objectives of other international agreements while pursuing its own intended results through its advocacy during its monitoring visits.

The following is a summary of the key unintended Program results by country:

Colombia

- The Program has been used as a model to expand actions at a national level and cover 36 departments with national resources.
- Development and implementation of an integrated TB/IMCI program in indigenous populations, including integration with vector control activities in two municipalities.
- In total, over 2,100 health professionals, health promoters and indigenous leaders have received training in DOTS.



- Social communication and education materials were produced in indigenous languages (Awapit, Arhuaca, Ticuna).
- Intercultural adaptation of the IMCI strategy for the Arhuaco population in the department of Cesar and the Tikuna population in the department of Amazonas.
- In total, over 109 health professionals trained in clinical IMCI.
- In total, over 1,000 health professionals, health promoters and indigenous leaders trained in community IMCI.

Ecuador

- The Program has been expanded as a model at the national level with over 8,300 professionals trained in clinical, community and neonatal IMCI nationally and the strategy implemented in 2,000 health establishments.
- Twenty-one schools have been party to an agreement between Ministry of Public Health, Ecuadorian Association of Schools of Medicine and Health Sciences (AFEME), Ecuadorian Association of Nursing Schools (ASEDEFE) and PAHO, to incorporate IMCI into university curriculum.
- Integration of gender equality and ethnicity focus in the IMCI strategy in 10 cantons to reinforce the equity and efficiency of the strategy, and to support the primary health care diploma (IMCI, maternal health).
- Over 4,211 health professionals, health promoters, professors and students and community members have received education and training about Chagas disease.
- Support to develop the national strategic plan for Chagas disease.

Paraguay

- In June 2008, the interruption of the vector transmission of *Trypanosoma cruzi* by *Triatoma infestans* in the Eastern Region of Paraguay was certified (in PCPCD areas).
- Information on Chagas disease and dengue incorporated as a basic competency in science curriculum in schools.
- Over 1,200 health professionals trained in clinical IMCI and 200 health professionals and health promoters trained in community IMCI.
- Over 800 health professionals trained in and provided prevention and care for sexually transmitted infections using the syndromic management approach.
- In the Chaco Region, supported:
 - Integrated primary health program for indigenous communities
 - Established a technical school with an intercultural focus on health care delivery to train local health providers and thus increase availability of human resources.



- Through gender and health thematic roundtables, obtained the national resolution (2005) to provide free syphilis testing and treatment for pregnant women and their partners.
- Support to Ministry of Public Health and Wellbeing initiative for primary health care through the IMCI strategy and STI components, which included protocol development.
- Development of national dengue prevention and control plans, implementation of COMBI projects, and development of a guide for municipal control of dengue.
- Support provided to respond to the dengue and yellow fever outbreaks.
- Support provided to the national Primary Health Care Initiative for training over 800 health professionals in cross disciplines (IMCI, communicable diseases, emerging diseases, non-communicable diseases, sexual and reproductive health) in over 500 local health services (family health units) in 14 departments; over 800 health professionals trained.

Peru

- An agreement was signed by the Ministry of Health, PAHO and mayors of 25 districts in the three departments to include funding for Chagas in their municipal development plans for health promotion, and disease prevention and control activities (July 2008).
- Interruption of vector-borne *T. cruzi* transmission by *Triatoma infestans* was certified on 4 December 2009 in Tacna and 16 September 2010 in Moquegua.
- Establishment of over 600 community surveillance posts in the Chagas disease project in Arequipa, Moquegua and Tacna that conduct surveillance and implementation of other programs (dengue, malaria, IMCI).
- Development of new tools for IMCI capacity building (computerized and long distance courses (ICATT)).
- Coordination of IMCI actions and support to the national CRECER strategy to reduce poverty and scale up actions.
- Over 9,000 health professionals trained in clinical IMCI, and 990 community health workers trained in community IMCI in the project sites.
- Development of the national dengue prevention and control plan, development and implementation of COMBI projects.

Dengue

 All countries adopted the integrated management strategy for the prevention and control of dengue, and developed national plans.



Gender Equality

In Paraguay, gender sensitivity training was carried out with health professionals and managers from the national programs participating in the PCPCD and in Year 5 *mesas temáticas en género* (gender issues discussions with broad range of participants) were introduced as part of the Program work plan. These were successful in not only creating gender awareness in communicable diseases, but also in achieving commitments for action and including civil society in the gender and health response.

For example, and as mentioned earlier, one of the results of the *mesas temáticas en género y VIH/ITS en 2005*, was a signed commitment on the part of the Ministry of Public Health and Wellbeing, and subsequent national resolution in August 2005, to provide all pregnant women and their partners with free testing and treatment for syphilis.

Key results in Paraguay include:

- Program has contributed to the inclusion of a gender perspective in annual plans and management of national programs on Chagas disease, HIV/aids (PRONASIDA), dengue, tuberculosis and child health (IMCI strategy) of the Ministry of Public Health.
- PAHO and CIDA, through the execution of the PCPCD, have provided strong support to the Women's Secretariat, which has opened doors to work in collaboration with the Ministry of Public Health.
- Both the Women's Secretariat and the Ministry of Public Health have demonstrated political will and excellent support for the execution of the project.
- The *mesas temáticas de género y salud* should be considered a successful model for interinstitutional discussion, and is being adopted by governments. Currently, the *mesas temáticas* are sustainable and can be absorbed by the national budget.
- The *mesas temáticas* have resulted in political inter-institutional agreements and efforts to address specific problems that affect maternal and child health such as:
 - Free diagnosis and treatment of syphilis and HIV in pregnant women
 - Free baby formula for women with HIV

In total, 911 persons (681 women and 230 men) have participated in training activities in gender equality in health:

- 15 gender and health workshops
- 6 workshops in planning for community IMCI with a gender focus
- 11 mesas temáticas de género y salud with government and civil society
- 2 workshops in the participatory diagnosis and development of education material with a gender focus

In Ecuador, gender equality was incorporated into the Program in 2009 and a work plan developed. Materials developed for communication and education in Chagas disease and IMCI were evaluated from a gender perspective to ensure that they are gender sensitive. Over 60 participants from the IMCI component in the Program sites have received training in gender and health and gender and social communication methods. In addition, local participatory diagnostic studies incorporating a gender focus were carried out in five program areas (cantons). The resulting information is being used to develop capacity building requirements, materials and communication messages in community IMCI. Key findings of the qualitative studies include:

- Key practices of the community IMCI strategy are performed mostly by women as men have almost no involvement in the care of children.
- The lack of education of women does not allow them access to gainful employment, which means they have limited or no economic independence from their partner. In some cases this lack of independence is only a perception, largely from the belief that only men can financially support the household, but in many cases women are actually those who financially support the household.
- The lack of education of women is also a barrier to women's participation as members with a voice and vote in local community organizations.
- Women are responsible for domestic work (taking care of home and family) even when they have paid work; however, this contribution is not valued nor assessed from an economic stand point.
- In terms of sexual and reproductive health, basic needs and medical care are available for women; however, there is limited or no access to sexual health knowledge, the prevention of sexually transmitted infections, and women do not have the autonomy to make decisions regarding their own body.
- There is also a gender gap in this area for men, as they do not have access to information about sexual and reproductive health. Moreover, mechanisms have not been designed to raise awareness about their importance and the risk of exposure to their partners from sexual behaviors.

In summary, the main strategic actions identified to reduce the gender gap for women are to increase their participation, leadership, and access to decision making positions in local or community organizations and to recognize and value their skills.

Development Factors

The iterative nature of PCPCD allowed for the flexibility to make changes based on the results and recommendations of the monitoring and evaluation visits, and to ensure that the Program continued to meet national and local priorities. Annual work planning and monitoring allowed for the alignment of the PCPCD with local priorities in each of the countries and remain appropriate and relevant to the health needs of the intended beneficiary populations.

During the mid term evaluation of February 2006, the evaluation team determined that the Program advances and results were reaching the intended beneficiary populations, which included those in marginalized areas and indigenous populations.

As part of the overall management of the Program, efforts were consistently being made to ensure the sustainability of achievements through its implementation and the continuation of its actions. Since the mid-term evaluation, programming has been emphasized at the departmental/regional and local levels to strengthen the management and supervisory capacity at those levels. Beneficiary communities have actively participated in the planning and implementation of activities.

During annual monitoring visits carried out in collaboration with the respective PAHO regional advisors and country teams, the advances of the PCPCD were presented to national and local authorities in terms of its progress in meeting intended results, coverage and challenges in implementation. The aim was to show the Program's impact in target areas and populations, and to demonstrate the achievements that are possible with the resources available. The overall goal was to obtain the commitment of the national level to contribute financial and human resources to scale up actions and address any remaining gaps.

Monitoring at the country level included meetings with mayors in the Program districts in order to obtain commitments to make communicable diseases a health priority for their populations, and to include funding for interventions in their annual operational plans to scale up actions and address remaining gaps. Alignment of programming with not only national plans, but also with local operational plans, as well as those of other agencies (UNICEF and Global Fund in Paraguay), optimized the funding available at country level.

The close monitoring at the local level was also successful in aligning programming at the departmental and local levels and optimizing available funding in the countries, as well as in

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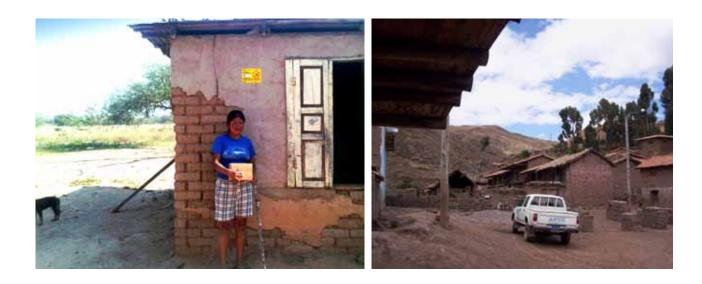


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opening doors to address other priority diseases and issues (for example, maternal health and malaria) that are not directly part of the PCPCD.

Evidence of sustainability is shown in the commitments made by national and local authorities in Colombia, Ecuador and Peru. Starting in fiscal year 2006 to 2007 efforts were made to sustain Program achievements and maintain and expand activities and obtain national support. For fiscal year 2010/11, a strong effort was made to obtain financial resources at country level to cofinance the implementation of programmed activities to improve the chances of sustainability of the PCPCD actions and achievements after its closure. This was achieved in Colombia, Ecuador (IMCI strategy) and Peru (Chagas disease and IMCI strategy). New national child health plans were developed in Colombia to support, expand and sustain the work of the PCPCD.

As part of the management plan for fiscal year 2010 to 2011, transition planning was carried out with the Ministries of Health in each country to identify the key achievements in implementation, the limitations, sustainability and priority actions for 2011 to 2013 to ensure and expand its results. This information is detailed in Annex B, Country Reports.



Management Factors

Management Strategy

The PCPCD was implemented with shared responsibility among PAHO Headquarters, PAHO Country Offices and the Ministries of Health in the beneficiary countries. The Program Manager, based at PAHO Headquarters, was responsible for the overall coordination of the Program, which included the management, planning and assignment of funding as well as the identification of technical support when needed. The Program Manager was responsible for consultation with key stakeholders in the development of annual work plans and reports, and coordinating and participating in the country monitoring visits. In addition, the Program Manager was responsible for identifying solutions with national counterparts to any challenges in implementation that arose during the execution of the Program.

PAHO country offices participated in the planning of PCPCD activities and the monitoring and evaluation of its implementation and progress towards results. They were responsible for assigning resources at the local level for the Ministries of Health to implement activities and coordinating with national authorities to prepare the Program reports, as well as providing information on any challenges in implementation (technical and/or financial) to PAHO Headquarters.

The Ministries of Health were responsible for ensuring that human resources were available to execute the Program and that established national commitments were met, for example to provide insecticide for the Chagas disease component and medicines and laboratory reagents.

The PCPCD funds were administered by PAHO Headquarters and transferred to the Ministries of Health through the PAHO country offices. Financial execution was carried out at the Country Office and Headquarters levels.

As previously mentioned, the PCPCD was responsive to change throughout its implementation, largely as a result of its continual monitoring of the country Program sites, discussions with national authorities at all levels, and annual programming where recommendations of the country monitoring visits were incorporated. As part of the country visits, financial execution was also discussed and meetings were held with the administrative teams in each country to discuss challenges faced and find solutions to improve execution.

The flexibility of the parties to modify the Program in response to changing circumstances or opportunities meant that the resources released from certain components (for example, as a result of the grants provided by the Global Fund) could be used to expand the coverage of certain actions that had been successful in more limited areas. For example, this allowed for the expansion of the coverage of vector control activities for Chagas disease in southern Peru, the establishment of an integrated health care program in Boquerón, Paraguay, and the extension of tuberculosis control activities and the integration of the IMCI strategy in Colombia.

Throughout its implementation, the PCPCD explored new ideas and approaches, many that were initiated as a means to reach the intended beneficiary populations and to address the lack of human resources available. These include the following:

- For the IMCI component a number of new tools were developed as a result of the PCPCD, which also created and strengthened local capacity in the countries. These include long distance clinical IMCI training tool (ICATT) and new approaches, local operational planning guide, community health workers guide, short program review assessment, Indigenous Population (intercultural focus), country tools (e.g.: Tool Box for Community IMCI In Ecuador) which also created local capacity.
- New ideas and approaches in terms of project management which included developing the systematic monitoring and country visits with national and district teams to not only improve the achievement of results, but also to strengthen the local capacity.
- The planning of the Program evolved to become focused at the district and community levels and included participation of those responsible for the Program at these levels.
- Integrated programs were developed and interprogrammatic collaborations were established to conduct training, monitoring and supervisory activities at country level.
 - In Colombia the development and implementation of an integrated TB/ IMCI program in indigenous populations, including integration with vectors in two municipalities, were used as models to scale up actions at a national level.
 - In Ecuador, the Integration of gender equality in the IMCI strategy in 10 cantones helped to reinforce the equity and efficiency of the strategy, and supported the development of the primary health care diploma (IMCI, maternal health).
 - In Paraguay, this included the implementation of an integrated health program based on primary health care that included: maternal health, IMCI strategy, immunizations, tuberculosis, sexually transmitted infections and Chagas disease.



- Based on the critical shortage of human resources identified in the Paraguayan Chaco, the Program, jointly with a PAHO Technical Cooperation between Countries (TCC) project between Bolivia and Paraguay, aided in the development of the curriculum to support the establishment of a technical school with an intercultural focus to train local health providers to increase the availability of human resources in the Chaco.
- To respond to the restructuring of the health system in Paraguay to implement Primary health care, the Program supported the training of health care providers at the local level (family health units) in priority areas identified by the Ministry of Public Health and Wellbeing, as well as the development of protocols for care at the primary health care level (for example, prenatal care).
- As part of the execution of its programmed activities, a solid inter-programmatic collaboration and coordination was established between the PAHO Areas of Health Surveillance, Disease Prevention and Control (HSD), Family and Community Health (FCH) and Gender, Diversity and Human Rights (GDR), and Health Systems and Services (HSS) at country level.
- South-to-South cooperation was promoted throughout in many of the IMCI (nutrition, training, monitoring and evaluation, etc.) and Chagas disease activities (monitoring and evaluation, technical support). This also included the exchange of experiences both among and within countries.
- Program activities were also coordinated and shared with countries not participating in the Program, most notably those of Central America for IMCI and Chagas disease.

Lessons Learned

- In the initial development phase of the PCPCD, it would have been useful to have included an assessment of the national capacity to utilize the funding within the designated time frame, in addition to the analysis of the epidemiology and gaps in the proposed thematic areas. This information, including an analysis of technical (e.g., national epidemiological surveillance system) and administrative capacity, might have justified a strengthening of the necessary infrastructure before initiating activities, in order to prevent administrative deficiencies from interfering with successful implementation.
- The establishment of partnerships with other nongovernmental and international organizations optimized the PCPCD's financing possibilities and the success of programmed activities. This was seen, for example, in the coalition between PRONASIDA, UNICEF, and PAHO, which aims to prevent mother to child transmission of syphilis and HIV.
- Constant monitoring and periodic evaluations conducted jointly by PAHO staff from Headquarters and from Country Offices, as well as by national technical personnel, contributed to the advances made in meeting the indicators. These activities are also helping to build national capacity in the areas of implementation, supervision, monitoring, and evaluation.
- Given the geographic and cultural differences of indigenous populations, the monitoring was
 also critical to better understand the processes, possibilities and limitations of working with
 the communities and to be more realistic pertaining to budgetary planning and potentialities
 for sustainability at the local level.
- At the outset, Program activities in tuberculosis in Colombia focused on strengthening health delivery networks, standardizing reporting and surveillance and control, which was not obtaining its anticipated results. A critical step was the establishment of a dialogue with the indigenous communities to learn how they perceive health and disease processes as well as to understand their knowledge, attitudes and practices regarding TB. This information was used as a baseline to measure the achievement of results.
- It was strategically important to establish an intercultural exchange of traditional and western
 medicine and knowledge, to respect the legitimate social organization of each indigenous
 community as part of the implementation of the Program, and to obtain the active
 participation of the communities in the development, validation and monitoring of activities.

- It was important to initiate Program actions in a select number of communities or areas to obtain results and to gather information and evidence on what works and what does not work and lessons learned before expanding to include other sites. This was an effective strategy in each country and in each component, most notably the STI program in Paraguay, where activities were scaled down to three rather than six departments as there were many challenges in meeting the results. This allowed for a refocusing of the work and the eventual expansion to include eight departments with Program support and the use of the approach at the national level. Another example is the tuberculosis component in Colombia where actions were initiated in two communities, and the Chagas disease component in Peru where actions were initiated in two districts.
- Community participation was essential in increasing health seeking behavior, achieving systematic disease surveillance, design and validation of community and education materials, and the mobilization of other sectors to participate in the Program actions and achieve results.
- Continual advocacy at the country level was important to ensure the sustainability of political will, particularly when new authorities came on board. During its implementation, this occurred in every country more than once. In some Program areas delays were experienced due to the reassignment of responsibilities among national authorities and repeated visits were necessary to obtain their commitment. In some areas this was not possible, as was the case of the department of Guainía in Colombia, where political commitment was not sustained and the decision was to reinvest the funding assigned to this department to the other participating departments.
- For the sustainability of results and actions, it was important to involve local authorities and inform them about the Program to obtain their support and commitment to address these diseases as priorities to improve the health of their communities, and to include funding for the same as part of their budgetary and planning processes. As part of the supervision and monitoring of the Program visits to local authorities were included to explain results, any challenges experienced in implementation, and the benefits to their communities. For example for Chagas disease, achieving the certification of the interruption of vector-borne transmission has not only a health benefit for their community but also an economic benefit as the department or region can be certified as a healthy tourist location.
- A shortage of human resources in the majority of countries impacted the execution of the Program and dictated new ways of working in terms of integrating programs to carry out training, supervision and monitoring and the delivery of health services.

- To be appropriate, relevant and sustainable, the Program has to be responsive to adapt to the needs and priorities of the target countries and beneficiary populations. During its execution the PCPCD was modified to include new components and geographic areas, as well as to work to support existing gaps identified as country priorities (information system for child health in Colombia; national plans for Chagas disease in Ecuador, national gender and health plan in Paraguay) and country priorities (primary health care in Paraguay). To support its responsiveness, annual planning and monitoring visits were essential elements.
- When developing projects to address the health priorities of indigenous populations, it is important to incorporate other sectors to address the social determinants of health (water, sanitation, housing etc.) and include nutrition as a line of action due to the large number of malnourished indigenous peoples, particularly children. This became apparent through the implementation of the Program among these population groups. Poor nutritional status directly impacts the capacity of patients to respond to treatment, and additionally in children the ability to learn and reach their full potential.
- It would have been advantageous to include the strengthening of health information systems in the Program as there is, on one hand, underreporting of morbidity and mortality data in all countries, and on the other, a need to streamline the reporting mechanisms (clinical registries, disease reporting forms) that are in place. Data reporting needs to be more standardized and in many areas, computerized to allow for its analysis to be useful for programming and planning purposes. This was identified as a key area for future technical cooperation.

Financial Summary

The following table presents the budgetary summary for the Program by fiscal year. It outlines the programmed budget for each year as indicated in the work plans and the expenses incurred for the same year. As shown, there was a significant increase in Program expenditures with the shift in the legal agreement from a contribution to a grant arrangement during Year 4, and the implementation of systematic monitoring visits to the countries in Year 5.

| PCPCD BUDGETARY SUMMARY | | | | | |
|---------------------------------|------------------------|---------------------------|--------------------------------|--|--|
| FISCAL PERIOD (2002 – 2011) | FUNDS Received US\$ | PROGRAMMED BUDGET US\$ | ACTUAL Expenditures US\$ | EXECUTION RATE BASED ON PROGRAMMED BUDGET | |
| Year 1 (1 April 02 - 31 Mar 03) | 634,650.00 | 634,651.00 | 189,612.00 | 30% | |
| Year 2 (1 April 03 - 31 Mar 04) | 748,250.00 | 1,200,000.00 | 603,227.00 | 50% | |
| Year 3 (1 April 04 - 31 Mar 05) | 415,455.00 | 712,349.00 | 645,338.00 | 91% | |
| Year 4 (1 April 05 - 31 Mar 06) | 1,851,266.09 | 1,138,136.00 | 983,770.00 | 86% | |
| Year 5 (1 April 06 - 31 Mar 07) | 832,032.28 | 1,455,121.00 | 1,238,538.00 | 85% | |
| Year 6 (1 April 07 - 31 Mar 08) | 1,898,905.87 | 1,810,314.00 | 1,624,594.00 | 90% | |
| Year 7 (1 April 08 - 31 Mar 09) | 1,717,462.41 | 1,862,999.00 | 1,890,223.00 | 101% | |
| Year 8 (1 April 09 - 31 Mar 10) | 1,694,417.37 | 2,070,443.00 | 1,450,296.00 | 70% | |
| Year 9 (1 April 10 - 31 Mar 11) | 521,485.53 | 1,364,667.00 | 1,455,392.00 | 107% | |

Table 4: PCPCD Budgetary Summary by Fiscal Period.

The following describes the PCPCD budgetary summary described in Table 4:

- In Year 1 the implementation period was only six months long.
- In Year 2 due to administrative issues the Program received 62% of its programmed budget.
- In Year 3 the Program budget was reduced based on the expenditures achieved in Year 2.
- In Year 4 there was an increase in expenditures due to the change in the legal agreement of the Program from a contribution to a grant arrangement in October 2005, and the implementation of systematic country monitoring visits. During the transition to a grant arrangement, no activities were undertaken during the period of 1 September to 10 October 2005. During this fiscal year, the Program received an advance of funds (US\$ 600,525) to be used in Year 5.
- In Year 5 there was a significant increase in expenditures due to the fact that for first time countries received 100% of their programmed budget (received 98% of total programmed budget).
- In Year 6 the Program received funds at the beginning of the fiscal year (April) for the first time during its execution. It is important to note the high level of execution that was achieved despite delays experienced in obligating new funds/activities for over eight weeks due to the implementation of a new PAHO financial reporting system based on strategic objectives and regional expected results.
- In Year 7 the Program was given an advance of funds (US\$ 428,938) to be used in Year 8
- In Year 8 there was a reduction in execution of planned programming due to the delay in receiving the approval to extend the Program (approved in August 2009 and funds received in September 2009), as well as the influenza H1N1 2009 pandemic which diverted human resources from other programs at both the country and regional levels.
- In Years 7 and 9, the expenditures were greater than the programmed budget as some of the funds of the previous fiscal year were executed during the planned fiscal year.

The following tables show the disbursement of the PCPCD funds by budgetary line item (Table 5) and by country (Table 6) and disease component (Table 7). Overall, the majority of funds received were disbursed in training and capacity building, followed by local implementation and operating costs and services.

| LINE ITEM- EXPENDITURES | TOTAL DISBURSEMENTS | PERCENTAGE (%) |
|---|---------------------|----------------|
| Seminars, Workshops, Meetings | 3,818,975 | 37.0 |
| Short term consultant (STC/TA) | 143,540 | 1.4 |
| Services (printing, translations, etc) | 1,825,552 | 17.7 |
| Local implementation, equipment and operating costs | 1,742,126 | 16.9 |
| Travel | 529,050 | 5.1 |
| Temporary Assistance | 0 | 0 |
| Staff salaries | 1,067,561 | 10.4 |
| Program Support Costs | 1,187,120 | 11.5 |
| TOTAL | 10,313,924 | 100.0 |

Table 5: Total Disbursements under the agreement by Budgetary Line Item



| Table 6: Total | Disbursements unde | er the agreement | by Country |
|----------------|--------------------|------------------|------------|
|----------------|--------------------|------------------|------------|

| COUNTRY | AMOUNT (USD) | PERCENTAGE (%) | EXCLUDING SALARY OF PC | PERCENTAGE (%) |
|-----------|--------------|----------------|---------------------------|----------------|
| Colombia | 1,299,128 | 12.6 | 1,299,128 | 14.2 |
| Ecuador | 946,489 | 9.2 | 946,489 | 10.4 |
| Paraguay | 1,818,383 | 17.6 | 1,818,383 | 20.0 |
| Peru | 2,529,963 | 24.5 | 2,529,963 | 27.8 |
| Venezuela | 53,729 | 0.5 | 53,729 | 0.6 |
| Regional | 3,666,232 | 35.6 | 2,459,887 | 27.0 |
| TOTAL | 10,313,924 | 100.0 | 9,107,579 | 100.0 |

The overall programming and assignment of funds was based on county performance or results. Compared to the analysis undertaken at the time of the closure of the Contribution Arrangement (in October 2005) the majority of funding shifted under the Grant Arrangement, with increased funding provided to Colombia and Peru. Analyzing the disbursements by country, Peru received the largest proportion of funds (24.7%), followed by Paraguay (17.7%) and Colombia (12.6%). The regional component received 35.3% of total funding, which includes the funds for the regional support for activities in dengue, the IMCI strategy and STI as well as the management and monitoring and evaluation of the PCPCD.

In terms of disease components, the IMCI strategy received the highest proportion of funding (31.5%), followed by Chagas disease (20.8%) and tuberculosis (10.5%). All funding for TB went for indigenous populations, except in Paraguay. The total funds specifically assigned to indigenous populations according to financial grant detail coding are US\$ 297,535.59 or 2.9%: However it is important to note that the majority of funding assigned to tuberculosis and the IMCI component are destined to indigenous peoples. Taking this into consideration, it is estimated that the total funding assigned to indigenous populations is closer to US\$3,443,824.85 or 33.4%

Table 7: Total Disbursements under the Agreement by Disease Component

| COMPONENT | AMOUNT (USD) | PERCENTAGE (%) | EXCLUDING Salary of PC* | PERCENTAGE (%) |
|--|--------------|----------------|----------------------------|----------------|
| AIDS/STI | 469,016 | 4.5 | 469,016 | 5.1 |
| Chagas Disease | 2,134,109 | 20.7 | 2,134,109 | 23.4 |
| Dengue | 795,164 | 7.7 | 795,164 | 8.7 |
| IMCI Strategy | 3,244,445 | 31.5 | 3,244,445 | 35.6 |
| Indigenous Population | 297,504 | 2.9 | 297,504 | 3.3 |
| Gender | 103,084 | 1.0 | 103,084 | 1.1 |
| Tuberculosis | 1,080,097 | 10.5 | 1,080,097 | 11.9 |
| Management/ Coordination/Monitoring | 2,190,505 | 21.2 | 984,160 | 10.9 |
| TOTAL | 10,313,924 | 100.0 | 9,107,579 | 100.0 |

* Project Coordinator

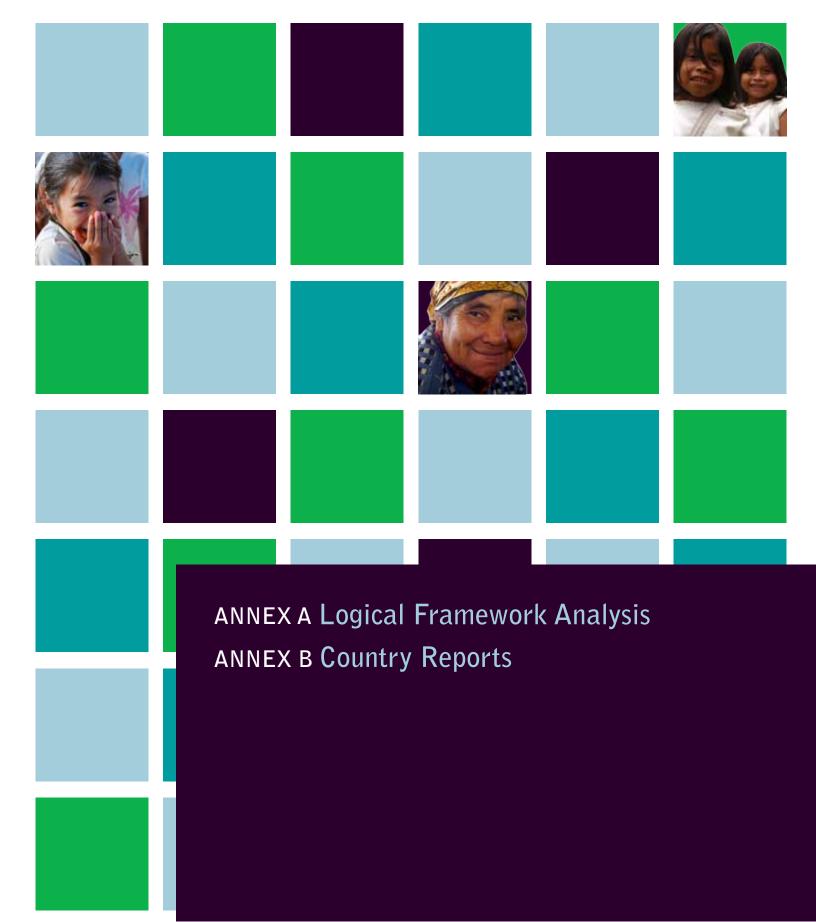
Compared to the Contribution Arrangement, funding was increased to the IMCI strategy with the inclusion of activities in Colombia and geographic expansion in Paraguay and Peru. Overall the percentage of funding was decreased in tuberculosis due to the removal of the TB components of the Program in Ecuador, Paraguay and Peru, and the percentage of funding assigned to STI was also decreased due to the removal of this component in Colombia and Ecuador (all because of new funding from the Global Fund for those diseases) and the slower than anticipated progress in Paraguay.

Country Reports

s part of the closing of the PCPCD, meetings were held in each of the four Program countries to discuss and develop transition plans to protect its results and continue its activities over the next two to three years (2011 to 2013). As part of these meetings, countries presented the significant achievements made during the implementation of the PCPCD, the challenges that were faced, lessons learned and evidences and efforts made to ensure the sustainability of results. A summary of the discussions of country closing meetings can be found in Annex B.

As part of the implementation of the Program, it is important to note that countries now have a knowledge base of information that did not exist prior to executing its programming. This includes the identification of key programmatic areas that remain to be strengthened that can be used to guide future planning and resource requirements. This information was presented to each of Ministries of Health at a high political level in the participating countries. During each meeting, the Ministries expressed their gratitude for the technical cooperation received from the Government of Canada and their desire to continue this successful collaboration in the future.







| NARRATIVE SUMMARY | IMPACT (LONG-TERM) | INDICATORS | ASSUMPTIONS |
|---|---|--|-------------|
| Goal/Objective/end | | | |
| To contribute to the prevention and control of those communicable diseases that cause the greatest burden of morbidity and mortality among children, young people, and adults in Colombia, Ecuador, Paraguay and Peru | Reduction of morbidity, mortality and disability caused by HIV/AIDS/STI, Tuberculosis, Chagas Disease, Dengue and early childhood diseases in the target areas of the participating countries | Morbidity and mortality from the most prevalent communicable diseases have been reduced in the target countries of the Project in men, women and children | |
| Purpose To strengthen the capacity of national institutions in the target countries responsible for planning, managing and providing sustainable, comprehensive and gender sensitive programs for the prevention and control of the most prevalent communicable diseases that cause the greatest death and disability | Objectives (outcomes) 1. Responsive and gender sensitive, adequately resourced programs have been developed and implemented in the priority communicable diseases in the target countries | 1.1 Participating countries develop communicable disease action plans tailored to the needs of the target population groups 1.2 Participating countries are incorporating a gender sensitive approach to the prevention and control of priority communicable diseases | |
| | 2. Increased quantity and capacity of human resources to conduct prevention and control activities at the local, department and national levels | 2.1 Number of human resources trained in communicable disease prevention and control and applying skills | |
| | 3. Increased capacity of national institutions to access/commit internal and external resources for the implementation of their CD reduction strategies | 3.1 Number of proposals developed to respond to funding opportunities (GFATM and other initiatives) 3.2 Government commitment to adoption of the Dengue integrated strategy | |

| NARRATIVE SUMMARY | IMPACT (LONG-TERM) | INDICATORS | ASSUMPTIONS |
|---|--|---|-------------|
| Goal/Objective/end | | | |
| Purpose To strengthen the capacity of national institutions in the target countries responsible for planning, managing and providing sustainable, comprehensive and gender sensitive programs for the prevention and control of the most prevalent communicable diseases that cause the greatest death and disability | Objectives (outcomes) 4. Enhanced community participation in the implementation of sustainable prevention and control action plans at the local level | 3.3 Analysis and advocacy of cost-effective resources required for implementing CD reduction strategies targeted in the Project 4.1 Number of community leaders, community health workers and volunteers implementing prevention and control measures in their own communities 4.2 Increased number of reported cases of communicable disease in target communities | |
| | | | (Continued |

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|---|--|---|
| COLOMBIA/TB | | · | |
| 1. The DOTS Strategy has been implemented among the indigenous population of the departments of Amazonas, Cesar, Guaviare, Guajira, Magdalena, Nariño and Vichada and District of Santa Marta using a community participation model | The proportion of registered cases that receive directly observed treatment (target=100%) and are directly supervised (targets = 70%) The Departments have complete and reliable epidemiological data for TB available by age and sex and treatment and program activities are evaluated The proportion of patients that receive direct supervision of treatment fulfillment by community members (target = 80%) Detection rate of respiratory symptoms in health institutions (target= 5% of consultations) | Registration book for patients with respiratory symptoms (DOTS) Case book Laboratory book and lab registry for sputum smear control Quarterly reports Workshop reports and agendas, and staff evaluations Reports of the meetings of indigenous communities including community leaders Report on training to community agents in health Report on adherence to the treatment Report on vaccination coverage | Human resources are available Financial resources are available to perform bacteriological tests Inputs necessary for diagnos are available, including human resources The reference laboratory provides timely feedback Drugs are available to guarantee full treatment to all patients Resources and trained staff are available for supervision Managers approve and support staff training and evaluation Approval and the support of the indigenous authorities. Suitable personnel available for training |
| COLOMBIA/IMCI | | | |
| 1. The provision of an integral approach to care that incorporates key practices with social actors has been strengthened in departments of Amazonas, Cesar, Guaviare, Guajira, Magdalena, Nariño and Vichada and District of Santa Marta | Proportion of professionals trained in clinical IMCI and TB that apply the instruments in accordance with national norms in the health services in the project areas (target=50%) Proportion of social actors who actively participate in the promotion of hey practices (target=60%) | Monitoring and evaluation reports Health records in participating health services | Sustained support of the national authorities Approval and the support of the indigenous authorities. Ministry of Health guarantees the provision of drugs and inputs |
| 2. IMCI has been incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the target areas | The criteria and lines of action for the incorporation of IMCI into universities in Colombia have been defined | Syllabus of studiesMonitoring reports | Political will of university authoritiesResources are available |

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(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|---|--|---|
| COLOMBIA/INTEGRATED VEC | TOR MANAGEMENT | | |
| 1. An integrated approach to prevent and control vector borne diseases, childhood illnesses and TB within the Healthy Environment Strategy has been developed in target departments | • Strengthen and consolidate the integration of strategies for the prevention and control of diseases transmitted by vectors, tuberculosis, and the improvement of the quality of care of children and pregnant women | Workshop reports and agendas, and staff evaluations Reports of the meetings of indigenous communities including community leaders Monitoring and evaluation reports Health records in participating health services | Political will Approval and the support of the indigenous authorities Intersectorial collaboration supported Resources are available |
| ECUADOR/IMCI | | | |
| 1. Regulatory, material, and logistical conditions necessary to apply the IMCI strategy have been created in the five priority provinces (Azuay Guayas, Imbabura, Los Ríos, Pichincha) | • The proportion of health services that have the technical and normative materials available, based on official recommendations of the Ministry of Health, to apply the IMCI strategy in the project areas (target=100%) | Standards and material for training available | Sustained support of the national authorities Timely resource availability |
| 2. Neonatal Component of IMCI has been implemented in the five priority provinces | Proportion of public health services that provide neonatal care in target provinces that apply the IMCI strategy (target = 100%) | Reports of follow-up visits Reports of training workshops | Adequate enforcement of the law providing for no-cost maternity and childhood care |

(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|---|---|--|
| 3. Population of children under 5 years of age have access to quality IMCI care in the community, outpatient services, and reference hospitals through the implementation of both clinical and community IMCI in the five priority provinces | Proportion of children under 5 years of age seeking health care in outpatient services or hospitals that receive adequate care following the IMCI Strategy. (target = 100%) Proportion of districts in project areas that carry out at least one participatory community diagnosis with an annual plan of action to strengthen actions in community IMCI (target=100%) | Reports of follow-up visits Results of evaluation and operations research Clinical records of health care units NGO reports | Ministry of Health guarantees drug and other inputs NGOs training CHA in community IMCI |
| 4. IMCI has been accepted and incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the target areas | • Number of schools of health sciences schools that have incorporated IMCI into their curricula, and show signs of institutionalization of the Strategy (target = 8) | University resolutions Reports of the universities and schools of the area. Curricula | Political will of the university authorities |

(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|---|--|--|
| ECUADOR/CHAGAS | | | |
| Strengthen the aspects of epidemiological and entomological surveillance in the priority provinces of El Oro, Loja and Manabi with community participation, intersectoral coordination and gender focus | • Percentage of communities (cantones) in the project areas of high risk with a system of surveillance established and functioning with community participation and an intersectorial focus (target=70%) | Triatomine registration reports Community leader reports and project monitoring reports | National authorities accept and support the proposed surveillance strategy as means for reducing the vector-borne transmission of Chagas disease Active participation of community leaders. Institutional support of the health sector at all levels, as well as that of religious institutions, and NGOs is maintained Mational counterpart: Laboratory inputs Human resources Logistics Drugs |
| PARAGUAY/IMCI | | | |
| 1. Regulatory, material, and logistical conditions necessary to apply the IMCI strategy have been created in the Departments of Alto Parana, Boqueron, Caazapa, Central, Itapua, Presidente Hayes and San Pedro | • The proportion of health services in project areas that have the technical and normative materials available, based on official recommendations of the Ministry of Health, to apply the IMCI strategy (target=100%) | Monitoring and evaluation reports | Political will and technical capacity to coordinate Institutional commitment |
| | | | (Continue |

| Children under 5 years of age living in peripheral areas of Asunción and the Departments of Alto Parana, Boqueron, Caazapá, Central, Itapua, Presidente Hayes and San Pedro have benefited from IMCI B. IMCI has been accepted and incorporated into pre | Proportion of public health services in project areas that apply the IMCI strategy (target=100%). Proportion of health services in project areas that have at least one person trained in clinical IMCI that treat children under five years that receive an annual monitoring visit (target=100%). Proportion of districts in project areas that carry out at least one participatory community diagnosis with an annual plan of action to strengthen actions in community IMCI (target=100%). Proportion of districts in project areas that have a dedicated person (leader) for community IMCI actions (target=100%) Number of schools of health sciences schools that have | Monitoring and evaluation reports Health records in participating health services Vision of the universities | Participating institutions provide technical and financial resources to develop a plan Regional political and technical authorities are interested in and committed to the plan Social participation |
|---|--|--|--|
| and incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, public health) in the | sciences schools that have incorporated IMCI into their curricula, and show signs of institutionalization of the Strategy (target = 3) | Reports of the universities and schools of the area. Curricula | authorities |

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Prevention and Control of Priority Communicable Diseases in South America (PCPCD)

| Logical Framework | Analysis: Goal | (impact), Purpose | (outcomes), and | Expected Results | (outputs) |
|-------------------|----------------|-------------------|-----------------|-------------------------|-----------|
|-------------------|----------------|-------------------|-----------------|-------------------------|-----------|

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|---|---|---|--|
| PARAGUAY/CHAGAS | | | |
| 1. A surveillance system to measure and monitor infestation by triatomines has been implemented with community participation, including in the Paraguayan Chaco | Number of reports of the presence of triatomines by the community, community leaders and schools about the presence of triatomines that were attended by the centre of notifications and the sectors of SENEPA Proportion of trained community leaders that participate actively in surveillance in risk areas (target=100%) Proportion of schools in risk areas that participate in Chagas disease week actions for prevention and control (target=50%) Epidemiological and Entomological Surveillance system established in Central Chaco Percentage of newborns diagnosed with Chagas (<i>T. cruzi</i>) that receive clinical, parasitological and serological follow up (target = 100%) | Plans of national surveillance systems of the country Triatomine registration reports Community leader reports and project monitoring reports | National authorities accept and support the proposed surveillance strategy as means for reducing the vector-borne transmission of Chagas disease Decentralization of surveillance is maintained Active participation of community leaders Institutional support of the health sector at all levels, as well as that of religious institutions, and NGOs is maintained Mational counterpart: Laboratory inputs Human resources Logistics Drugs Means of transportation to the regions and fuel |

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS | |
|---|--|---|---|--|
| PARAGUAY/STI | | | | |
| 1. STI program management has been strengthened, and the approach to prevent and control STIs expanded, with an emphasis on congenital syphilis, and gender issues | Proportion of health services in each sanitary region that are implementing the syndromic management approach (target = 95% in project areas) Proportion of health providers trained in STI prevention and control in the project areas that diagnose and treat men and women according to established standards (target = 100%) | Progress reports, evaluations, technical cooperation visits reports Hospital and laboratory statistical data Health clinic statistical data Training manuals Evaluation reports of trainings activities | Human resources available Allocation of adequate funds Availability of funds Close collaboration between the tuberculosis and AIDS program Sustainable political support to deal with delicate subjects as the STIs, the sexuality of the adolescents, stigma, etc Mational counterpart: Professional in charge of the STIs Reagent, laboratories Human resources Drugs Facilitate in the regions the time and the places sites for the training Means of transportation to the regions and fuel | |
| 2. The coverage of the diagnosis and treatment of syphilis in pregnant women and newborns (congenital syphilis) has increased | Proportion of pregnant women attending prenatal care services that receive a VDRL test (target = 100%). Proportion of pregnant women with positive serology for syphilis that receive treatment according to established norms (target = 100%) Number of reported cases of syphilis in pregnant women. Incidence of congenital syphilis | Laboratory diagnosis manual for STI Periodic reports of the national reference laboratory Laboratory database Case notifications Hospital and laboratory statistical data | Health authorities in the regions provide time and site for training activities National counterpart: Laboratory inputs for STI Human resources Logistics Drugs Facilitate in the regions the time and the places sites for the training Means of transportation to the regions and fuel | |

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(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|--|---|--|
| 3. The STI surveillance system has been strengthened and incorporates second generation surveillance activities which include behavioral, gender and sociodemographic factors | • Epidemiological data on STIs are available by behavioral and sociodemographic factors including age and sex for decision making and resource allocation purposes | National strategic STI surveillance plan Initial diagnosis and progress of the STI surveillance system Standards and training materials Regular epidemiological bulletins, annual reports. Other publications, data submitted to congresses | Human resources available Regular budget assigned to surveillance activities Close collaboration between the national AIDS/STI Program and the Office of the Director of Epidemiology National counterpart: Epidemiologists Development of training manual Human resources Reagents Vehicle and fuel |
| PARAGUAY/Integrated health p | rogram | | |
| 1. An integrated primary health care program with a multicultural and equity focus has been implemented in the communities of the Department of Boquerón in the Paraguayan Chaco | Proportion of health professionals at local level that provide comprehensive care with a multicultural focus (target= 80%) Training centre established for the formation of local technicians to work in health care with an intercultural focus Proportion of health services with an established health information system ant that use it for local programming purposes (target=50%) Proportion of communities that participate in planning for health and environmental actions (target=50%) | Monitoring and evaluation reports Development of operational plans Curriculum available | Sustained political support Active participation of community Human resources available National / departmental counterpart: Medicines, reagents, laboratory support, equipment |

(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|---|---|---|
| PERU/IMCI | | | |
| 1. Regulatory, material, and logistical conditions necessary to apply the IMCI strategy have been created in the target provinces (Apurimac, Cusco and Huancavelica) | • The proportion of health services in project areas that have the technical and normative materials available, based on official recommendations of the Ministry of Health, to apply the IMCI strategy in the project areas (target=100%) | Available printed material Reports on follow-up visits | Sustained support of the national authorities Timely availability of the resources Workshop on validation of the neonatal component carried out to October of the 2002 Plan of operation (PO) for IMCI prepared annually from 2003 |
| 2. Target area health services (Apurimac, Cusco and Huancavelica).that serve children under 5 years of age apply the IMCI strategy | Proportion of public health services in project areas that apply the IMCI strategy (target=100%) Proportion of districts in project areas that carry out at least one participatory community diagnosis with an annual plan of action to strengthen actions in community IMCI (target=100%) Proportion of districts in project areas that have a dedicated person (leader) for community IMCI actions (target=100%) | Reports on follow-up and supervision visits Final report on evaluation of IMCI | Health Information System operating in Cusco, Huancavelica and Apurimac Community IMCI strengthened in these departments by others partners (NGO, UNICEF, PAHO, Universities) Ministry of Health guarantees the provision of drugs and inputs |
| 3. IMCI has been accepted and incorporated into pre and post graduate training in schools of health related professions (medicine, nursing, technical) in the target areas | • Number of health sciences schools that have incorporated IMCI in the academic curriculum (target = 17) | Syllabus of studies Official records of area universities and schools | Political will of universitiesIntersectoral collaborationResources are available |

(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS |
|--|--|---|--|
| 4. System for monitoring and supervising IMCI structured and operational | • Proportion of health services in project areas, that have at least one person trained in clinical IMCI that treat children under five years, that receive an annual monitoring visit (target=100%) | Published supervision and monitoring documents Reports on supervisory visits Evaluation reports | At least one representative of each health directorate (MOH and departments) participating in the project participates in annual evaluations |
| PERU/CHAGAS | | | |
| 1. The vector has been eliminated in disinfected dwellings and peri- domiciliary and a post spraying entomological surveillance system has been installed with the participation of men and women of the departments of Arequipa, Moquegua and Tacna | The number of dwellings disinfected at the end of the project (target = 100%) Arequipa: N=40.000 Moquegua: N=21.000 Tacna: N=1.500 | Annual evaluation Regional evaluation reports | The insecticides are obtained through PAHO's procurement system at preferential prices. The Ministry of Health maintains its financial and political commitment to ensure the operations of the project. National counterpart: Laboratory inputs Human resources Logistics Drugs |
| 2. The presence of the transmission of <i>T. cruzi</i> has been verified in the departments of Apurimac, Ayacucho and Ica | • A serological base line for children 0 to 5 years of age established | Annual evaluationRegional evaluation reports | The Ministry of Health maintains its financial and political commitment to ensure the operations of the project Human resources |

(Continued)

| EXPECTED RESULTS | INDICATORS | SOURCES OF VERIFICATION | ASSUMPTIONS | | |
|--|---|--|---|--|--|
| PROJECT MANAGEMENT/RE | PROJECT MANAGEMENT/REGIONAL | | | | |
| The PCPCD has been properly managed, supported and evaluated throughout its lifetime | Completeness and timeliness of work plans, technical and financial reports by PAH0 to CIDA in accordance with the Grant Arrangement Number of supervisory visits to monitor the execution of Program components in accordance with expected results and indicators (target=3 per year) | Documents submitted: work plans; progress reports. Trip reports Monitoring and evaluation reports Training sessions | Technical support from PAHO'S technical team is available as programmed. Funds are available in a timely manner | | |
| 2. Technical support has been provided to the participating countries by the respective PAHO regional programs, including the introduction of IMCI into the curriculum of health sciences schools in the target areas | Number of technical visits to support the implementation of project activities. Proportion of academic institutions involved in the Program that have introduced the IMCI strategy (target=80%: (N=15)) | Trip reports Monitoring and evaluation reports Training sessions IMCI Curriculum materials for Health Sciences schools and distance learning IMCI evaluation survey Guidelines and Protocols (IMCI and STI) | • Technical support from PAHO'S technical team is available as programmed | | |
| DENGUE/REGIONAL | | | | | |
| The national capacity in the target countries to respond to Dengue has been improved through the implementation of the Integrated National Strategy (INS) for Dengue | Number of countries with social communication plans for the prevention and control of dengue implemented at the local level (target = 3). Number of countries with strengthened epidemiological and entomological surveillance systems in areas of risk (target=3) | Situation analysis reports Monitoring and evaluation reports Agendas and final reports on the seminars/workshops. | The Ministry of Health and other actors give continuous political and financial support Health authorities facilitate the training of the personnel The selected personnel bring together the required training profile | | |

Country Reports²

Colombia

The PCPCD components in Colombia were tuberculosis, Integrated Management of Childhood Illnesses (IMCI) Strategy, and the integration of IMCI and tuberculosis.

General achievements

- Health Insurance Companies have been equipped with the information they need for planning and decision making related to tuberculosis and IMCI. A culture of epidemiological analysis of information has been established through analysis units working in conjunction with the departmental and municipal health secretariats, Health Insurance Companies and Health Care Providers, and indigenous authorities.
- Tuberculosis data disaggregated by sex, age, and ethnicity are available to support programming of activities targeting indigenous peoples, in conjunction with the IMCI strategy.
- Human resources have been trained and placed in all Project areas and in the departments included in the technical cooperation agreement between PAHO and the Ministry of Social Protection.
- The issues of tuberculosis and IMCI among indigenous peoples have been placed on the national public agenda.
- Program management, monitoring, and supervision improved in Project areas.
- Territorial entities were empowered and are committed. In the long term leads to sustainability by creating a direct relationship between these entities and the allocated budget amounts, which in most departments are four to eight times higher than CIDA's financial contribution. This is also clearly reflected in the political will displayed by departmental and traditional authorities in response to the leverage provided by the Project over the eight year period.
- A permanent dialogue has been established between practitioners of traditional anc' medicine, which is a crucial aspect of comprehensive patient care based on the STOP TB and IMCI strategies.

² Original version in Spanish.

Integrated Management of Childhood Illness (IMCI) Strategy

Achievements

- IMCI has been placed on the public agenda and this has led to the social mobilization of stakeholders and the establishment of a public policy strategy in some municipalities.
- Regulatory development has been strengthened through the inclusion of IMCI as a priority strategy under the National Public Health Plan (Decree 3039 of 2007) and its adoption by some institutional health service providers pursuant to internal resolutions.
- Financial resources have been increased. Project implementation served as an incentive for territorial authorities to increase their budgets in order to expand the implementation of IMCI training and monitoring activities to other municipalities and institutions. The positioning of IMCI as a priority in the Colombian regulatory framework led to increased funding for its integrated management in departments and municipalities.
- Pilots and learning experiences on successful IMCI management were designed and validated: monitoring of trained staff and IMCI registries, which is recognized as an incentive for health teams and a means of ensuring the sustainability of effective implementation of the IMCI clinical component. In addition, auxiliary staff was assigned to improve the post consultation delivery of medicines and preventive education, and detect any warning signs that might be present in patients.
- An ongoing dialogue has been established among practitioners of traditional medicine and "western" medicine for the integrated management of prevalent childhood illness.
- Key practices associated with the IMCI strategy were culturally adapted for the Arahuaco (Pueblo Bello) and Tikuna (Puerto Nariño) communities. There is also a growing awareness of the need to design a primary care strategy with an intercultural approach.

Challenges

- Institutional health service providers will have to be strengthened to create a culture of intersectoral and multidisciplinary work and establish health care networks.
- The work of health promoters, public health technicians, nursing auxiliaries and extramural teams should be reinforced by improving their working conditions, developing and fine tuning data collection instruments, and defining clear roles and indicators for processes and results.
- The problem of human resources turnover and instability needs to be addressed; employment relationships will have to be corrected to ensure the continuity of efforts.
- IMCI should be integrated into the institutional strategies of the Health Care Providers to ensure continuity in implementation regardless of the instability of professional human resources.
- There is a need for public policies that shift the care model towards the development of primary health care.

Priority actions

- Strengthen referral and cross referral systems through the development of appropriate instruments, the application of data systematization methods, case follow up, and the establishment of a culture of information analysis.
- Ensure that IMCI key practices are adopted by nationally representative social actors whose institutional roles are closely related to IMCI (Colombian Institute of Family Welfare and education departments.
- Prepare work plans for the dissemination of interculturally adapted approaches and strategies. This should include the development of working materials for social actors and community agents, fine tuning of data collection forms, conducting baseline surveys, and adjustments to health promotion and disease prevention programs.
- Continue advocacy efforts among territorial and institutional boards to ensure that the necessary resource allocations are in place for their sustained management and for strengthening intercultural approaches.
- Strengthen institutional management to enhance the installed network's capacity to provide IMCI inputs, equipment, and medicines, and ensure ongoing training and monitoring of health teams and improve their employment stability.
- Enhance information, surveillance, and data quality control systems through the periodic unification, review, audit and analysis of IMCI registries.

Tuberculosis

Achievements

- The treatment dropout rate declined, treatment compliance improved, and the capture of patients with respiratory symptoms increased. The cure rate for TB patients also improved.
- The service delivery network was strengthened through the standardization of registries for tuberculosis prevention, surveillance, and control activities, and the implementation of activities to improve the capture of patients with respiratory symptoms.
- Factors that adversely affect treatment compliance were identified. To this end, field studies on community living habits were carried out and changes were introduced to improve adherence to treatment. The Project also helped to strengthen the tuberculosis treatment supervision network, building on the work carried out with the communities.
- Microscopy networks were formed and consolidated. Training was provided on the detection of cases with respiratory symptoms, bacteriological diagnosis and tuberculosis treatment.
- The work of the Mycobacteria Laboratory was coordinated with the National Laboratory Network of the National Institute of Health.

- Health professionals and auxiliary nursing staff were trained on the national guidelines, the Guide for the Comprehensive Care of Pulmonary and Extrapulmonary Tuberculosis, the "Stop TB" strategy, and the "Colombia free from Tuberculosis" strategic plan.
- The national program's management capacity was improved through technical assistance and support for the activities undertaken in each department, and monitoring of municipalities and service delivery networks.

Challenges

- Active case detection, specifically in communities that have been affected by this disease in recent years, has yet to be put into practice.
- Circular 058 on the need to conduct a study on tuberculosis patient contacts must be fully applied.
- It is necessary to improve health care workers' ability to recognize the signs and symptoms of tuberculosis in children, and to improve the quality and timely diagnosis and treatment.
- Strictly supervised treatment must be guaranteed in remote areas or communities, together with providing nutritional support for patients.

Priority actions

- Increase active case detection in indigenous populations.
- Improve the management of information on active case detection that includes an analysis of respiratory symptoms and the case and contacts registries, respectively.
- Improve the prevention, diagnosis and monitoring of cases of childhood tuberculosis.
- Implement the use of cultures for tuberculosis diagnosis. Address problems related to human resources and reduce operational limitations to performing cultures in Project target areas.
- Identify appropriate mechanisms to improve the patient cure rates.

IMCI/TB Integration

Achievements

- Tuberculosis and IMCI components were included in the medical histories of children under five years.
- The IMCI/TB integration process aimed at saving the lives of children under five years and pregnant women began by creating linkages among networks of social actors for the implementation of the IMCI's 18 key practices, including those related to tuberculosis.

- Public private partnerships were established comprised of traditional authorities, indigenous
 organizations, national and territorial authorities, local health teams, and international
 cooperation agencies involved with indigenous communities. Training materials for indigenous
 promoters were designed and published, along with informative materials in the mother
 language of each community. A strategic communications plan was prepared based on an
 intercultural dialogue and the cultural traditions of the Awá, Ticuna and Arahuaco peoples.
- Human resources involved in the two strategies were educated and trained to handle both TB and IMCI in an integrated way.

Challenges

- Provide advisory support and apply guidelines for a comprehensive approach to childhood tuberculosis.
- Develop appropriate indicators for the monitoring and evaluation of IMCI/TB programs and results.

Priority actions

• The Project recommends strengthening the analysis of data disaggregated by sex to determine whether there is a need to modify or develop new approaches to incorporate a gender perspective in communication, promotion, prevention, and control.

Project sustainability and lessons learned

- Project beneficiary departments have been co financing the programmed activities since 2006.
- TB and IMCI activities were expanded within each department and national institutional policies on both components were established.
- The IMCI strategy has been incorporated in the academic curricula of several universities, including some at the departmental level.
- Project activities were included in the PAHO/Ministry of Social Protection agreement. Beginning in 2008, the Ministry of Social Protection allocated funds for tuberculosis control among indigenous people pursuant to this agreement. This contribution was more than US\$4 million in 2010.
- The political commitment to the IMCI strategy is evidenced in the budget allocated to it by the Ministry of Social Protection, which was US\$1.5 million for the period 2009 – 2012. These funds make it possible to provide technical support for the application of the IMCI strategy in the departments based on the experience acquired through the Project.

- The active participation of the community, social actors, and local authorities reinforces key practices and the health sector as a whole.
- The inclusion of IMCI in the health services package for children under five years is conducive to its sustainability.
- The licensing of outpatient services ensures that IMCI's clinical component will be implemented with quality and compassion.
- The IMCI community component methodology has become a cornerstone of public policy and the basis for the development of primary health care.
- The Ministry of Public Health has progressively taken on a leadership role at the local level, and this is reflected in planning processes.
- The national government is supporting the 24 provinces that have committed to improving child health and requires more systematic assistance.
- Staff has been trained in the three components of IMCI; a team of facilitators is now in place at the provincial level for replication initiatives.
- The political priority demonstrated by the country for IMCI has been reflected in budget allocations. Over the past four years, national funds have been used to complete the training of health workers in the strategy's components.

Ecuador



General achievements

- The Project met 100% of its targets for the IMCI and Chagas disease components.
- A gender perspective was integrated into the IMCI strategy in Project areas and there is a commitment to scale up the strategy at the national level and integrate it with actions of the national Chagas control program.
- Strategies and materials for both components were designed and validated with the participation of the communities involved.

Integrated Management of Childhood Illness (IMCI) Strategy

Achievements

- The Project has served as a model to scale up IMCI activities at the national level.
- The Project has facilitated the scaling up of all IMCI strategy components to the national level, including: expanded coverage; incorporation of the neonatal and hospital component; strengthening of child health care in health services and in the community; human resources training; strengthening of monitoring and evaluation; and, IMCI training at the university level.
- There is evidence of human resources development and the establishment of work teams for IMCI in all Project components and participating regions, as well as at the national level.
- The analysis and use of information on child health for decision making purposes improved. The capacity to resolve (close) cases also improved through follow up, monitoring and evaluation.
- Neonatal services were assessed in 10 hospitals and the outcomes were used as the basis for the development of a national plan for the Reduction of Neonatal Mortality (perinatal interventions).
- With respect to human resources development, regional PAHO/WHO educators provided training to facilitators at the national level and to the health teams of secondary and tertiary level hospitals. In addition, national, provincial, and local facilitators were trained in the clinical and community components and health workers in the Project's nine target areas

were given training and refresher courses on the clinical component. Approximately 2,100 health professionals received training in the neonatal component and the Neonatal Mortality Reduction Plan, and 2,500 professionals were trained in the clinical and community components in Project target areas.

- The Direction of Health Promotion received support in the form of national facilitators and training materials for the Provinces of Azuay, El Oro, Guayas, Imbabura, Loja, Los Rios, Manabí and Pichincha.
- Participatory local assessments, baseline surveys with a gender focus, and local planning have been carried out in all Project target areas to guide interventions designed to improve selected key practices based on the epidemiological profile.
- The issue of child health has been included in the discussions of social actors and local authorities in the Project's target provinces.
- The Project has helped to raise the profile and underscore the importance of child health and the IMCI strategy, and particularly the latter's neonatal and community components. Moreover, funding from the CIDA Project and technical assistance from PAHO contributed to the establishment of national standards and policies, such as the Plan for the Reduction of Neonatal Mortality.
- The Project secured an agreement with 14 universities represented by AFEME and ASEDEFE, and 10 of them have included child health content with an emphasis on the IMCI strategy in their education plans. The Project's many activities for the incorporation of IMCI into academic curricula included: training and refresher courses for faculty at the undergraduate and graduate levels; the provision of technical and regulatory materials to universities; faculty participation in the review of standards and training documents on IMCI components; university assessments to measure progress in incorporating child health content into curricula; and implementation of mechanisms for the monitoring and evaluation of agreements between the Ministry of Public Health and the universities.
- Social actors in Project target areas are actively engaged in participatory local assessments, baseline surveys and basic planning workshops. This has served to progressively reinforce the Ministry of Health's leadership at the local level.

Challenges

- Certain administrative aspects that had repercussions for budget execution in 2008 must be streamlined.
- Managerial staff at the provincial and local levels is involved in multiple activities and programs and this has an impact on continuous Project implementation.
- Changes in local authorities (mayors and others) and health care staff turnover in the course of Project implementation have hampered the continuity and prioritization of activities.

 A deeper commitment to the work with the universities is required on the part of university authorities and faculty. Political support has not been consistent in this area. The wide ranges of educational methodologies and curricula in use that are weighted heavily towards hospital work have impeded the effective integration of IMCI into higher education.

Priority actions

- The community component of the IMCI strategy needs to be expanded at the local level, and all components of the IMCI strategy must be implemented in all provinces.
- Conduct operational studies with universities at the national and regional level, especially in relation to primary health care, with a view to including IMCI in university curricula.
- Expand the integration of the gender and ethnicity focus in the IMCI strategy in the country.
- Expand IMCI activities to nursing schools that have not yet participated to ensure all degree candidates receive training, and strengthen the coordination between the schools and the Health Directions (ASEDEFE).
- Improve the promotion and dissemination of the community component and social communication targeting traditional birth attendants (Province of Imbabura).
- Highlight the commitments made by area managers and include Playas as a Project target area. The number of human resources in health areas must be increased (Province of Guayas).
- Galvanize political support in the Province of Los Rios and document the priority child health issues to ensure that the needs of this population group are addressed.
- Arrange for the support of the emergency network and include IMCI in the family health card in the 10 areas in the Province of Azuay.
- Prepare and apply neonatal retinopathy standards (Province of Azuay).
- Scale up activities for IMCI implementation in Cayambe through the Provincial Director, and include training in the IMCI community component (Province of Pichincha).

Chagas disease

Achievements

- The Project provided a methodology for community surveillance of the presence of Chagas disease vectors that includes surveillance of the reintroduction of domiciliary or peridomiciliary vectors in areas where they have been eliminated through control program interventions. Community surveillance systems were also set up to detect problems in new areas where no prior control interventions have taken place.
- Materials were produced for community training in surveillance for the prevention and control of Chagas disease.

- The Project helped to correct and streamline the serological diagnosis of Trypanosoma cruzi infection, and establish a quality control system for Chagas laboratory samples.
- The strategic plan was revised and updated based on the documentation produced by the Regional Program for Chagas Disease Control in Latin America – a Regional Public Goods Initiative.
- The Operational Standards Manual for the National Chagas Program was drafted and is currently in the final review phase.
- Active case finding and detection of Chagas disease was scaled up to cover 15,539 households in endemic provinces; 2,656 houses found to be positive for the vector received control interventions. This resulted in an estimated 66,640 inhabitants being protected from contracting infection.
- The epidemiological surveillance plan for Chagas disease was validated with community participation and a gender focus; 57% of community collaborators/ leaders are women.
- 143 community surveillance identification posts were installed in the provinces of El Oro (65), Guayas (39), Loja (16), and Manabí (23).
- 846 health professionals and workers were trained in the prevention and control of Chagas disease, along with 684 professors, 44,431 students, 946 community promoters or leaders, and 95 microscopists.
- Interinstitutional coordination between the National Malaria Eradication Service, the National Institute of Hygiene, and universities improved.
- A National Committee on Chagas Disease was formed to guide and unify research and activities for its control in the country. The Committee is made up of delegates of the National Malaria Eradication Service, National Institute of Hygiene, Catholic University of Ecuador, Department of Tropical Medicine, Direction of Health Promotion, the Department of Epidemiology of the Ministry of Public Health and PAHO.

Challenges

- There is a commitment to include the purchase of insecticide and inputs in the Chagas program's annual plan. It is essential to follow through on this commitment.
- Initial discussions were held with certain mayors (local governments) about making Chagas disease a priority in their local operational plans. This will be extremely important once health services have finally been regionalized and local governments have taken on the responsibility of managing and planning funds.
- Changes in government, the regionalization of the health system, and the restructuring of the SNEM, which is still in progress, have contributed to delays in the implementation of Project activities.
- The lack of timely resources for the implementation of scheduled Project activities also hindered progress.

Priority actions

- Continue and expand entomological monitoring for the capture of triatomines and reservoirs in high infestation areas.
- Review existing information on the distribution of the disease and strengthen the Chagas disease information system at the local level.
- Improve knowledge of the situation of Chagas disease in the country for priority setting. A
 necessitates the need to conduct a national survey.
- Improve surveillance and medical care of pregnant women and newborns (congenital Chagas disease) in priority municipalities.
- Train health professionals in the clinical care of Chagas disease in the critical areas with cases.
- Continue and scale up active case finding in children and serology in high risk areas in conjunction with IMCI and immunization programs.
- Expand communications and educational activities in at risk communities and after carrying out interventions. Prepare a package of materials for the Amazon region in order to understand better the situation of transmission of Chagas disease there.
- Evaluate the materials on Chagas disease used in intervention areas after spraying has occurred in order to assess the impact the messages have had in the communities.
- Prioritize prevention and control interventions in the Amazon region of the country.
- Engage in a discussion of possible causes of Chagas disease transmission and prepare an agenda for research and intervention.
- Carry out operational studies to determine, for example, the vector's susceptibility or resistance to insecticides, use of medicines (resistance) and oral transmission of the infection.
- Launch a regular insecticide application program in areas known to be infested with domiciled vectors.
- Strengthen monitoring and evaluation of Chagas program activities.

Project sustainability and lessons learned

Chagas disease

- The rapid diagnostic tests did not work in Ecuador and should have been field validated prior to use. While this method has been used successfully in Central America, an analysis of its use in Ecuador detected problems relating to sensitivity (loss) and an excessive number of false positives.
- Due to the inherent difficulties of maintaining the quality of Chagas tests, the national program should not rely on serology.

IMCI

- Genuine inter institutional coordination improves resource use and generally enhances efforts and institutions.
- It is not enough to ensure the availability of supplies for service delivery, without also ensuring the training and continuing education of human resources, follow up, and monitoring and evaluation.
- The sustainability of community achievements is directly correlated with activities that foster the participation of different social actors and with the visibility of the outcomes obtained as a result of that participation. Sustained empowerment of stakeholders, training, and monitoring contribute to the vitality and managerial sustainability of the Project.
- Sustainable public policies, and the resources to implement them, can be developed and established through coordinated, joint efforts and social participation.
- While individuals committed to IMCI are working proactively with university medical and nursing schools, political advocacy is still needed to succeed in having IMCI components built into official curricula.
- While the inclusion of human resources training entities from the outset of IMCI implementation helps to reduce future training costs, the lack of institutional strengthening at the hospital level represents a missed opportunity in terms of putting the skills and knowledge acquired into practice. The Ministry of Public Health still needs to become involved in human resources education and training.
- The comprehensive and integrated care promoted by the strategy leads families and communities to prioritize care for children, to seek care in a timely manner and to obtain quality health care.
- The government has made IMCI a priority. Nonetheless, more lobbying is required at the
 provincial and local levels (provincial and cantonal health councils), since they do not consider
 IMCI a priority that could be funded by sectional, provincial and cantonal governments.
- At the local level, the education sector, (local) governments, grassroots organizations, parish boards, churches, and community health workers play a leading role in activities relating to key family practices.



General achievements

- The majority of the Project targets were met.
- There is evidence of human resources development and the establishment of work teams in all Project components and in all participating regions.
- Through Project activities, planning, supervision, monitoring and evaluation capabilities have been strengthened in all components at the central and regional levels.
- The materials developed are being used nationally in all Project components.
- The Project has served as a model to scale up activities related to sexually transmitted infections (STI) and IMCI at the national level.
- The Project took advantage of the opportunity to develop new tools for Chagas disease and dengue, which were used to improve the quality of interventions and the efficient use of available resources.
- The Project's flexible programming to serve local needs enabled it to tailor its actions to fit the country's priorities (e.g. the Primary Health Care initiative, the inclusion of a sub Project in the Paraguayan Chaco, training and response to dengue and yellow fever outbreaks and training in field epidemiology).

Integrated Management of Childhood Illness (IMCI) Strategy

Achievements

• A total of 1,299 human resources including physicians, nursing staff, volunteer health promoters and midwives, were trained in the Project's seven health regions from 2003 to 2010. Similarly, 200 people in 24 districts of five health regions were trained in the community component of IMCI from 2006 to 2010, and the training of national facilitators led to the reestablishment of a facilitators' group for the community and clinical components of IMCI. In addition, 187 physicians, other licensed professionals, and auxiliary nursing staff from 103 family health units in seven health regions were trained in clinical management of the IMCI strategy.

- Local IMCI programming was carried out in 11 regions, with the participation of regional authorities, and was expanded to four additional Project regions.
- Training materials were developed, updated, printed, and distributed according to the national standards of the Ministry of Public Health and Social Welfare and with the support of national technical groups from various institutions in this sector.
- Clinical IMCI courses were integrated into the curricula of the schools of medicine and nursing of 12 universities. The community component of IMCI, specifically the subject of community medicine, was included in the curricula of two universities.

- Instruction in the IMCI strategy must still be more fully integrated into the undergraduate and graduate curricula of institutions devoted to educating human resources in the health field, and agreements between universities and the Ministry of Public Health and Social Welfare are needed to ensure the sustainability of the activities.
- Design and carry out national and regional operational studies in conjunction with universities on subjects related to primary health care.
- Implement all IMCI components as part of primary health care in family health units nationwide.

Priority actions

- Since 100% of the targets for community IMCI and for the diagnosis and treatment of syphilis in pregnant women were not met, these activities should be resumed.
- Hold a workshop for the reinforcement and refresher training of regional facilitators and supervisors.
- Scale up the community component of the IMCI at the local level and complete the training
 of volunteer health promoters and lay midwives.
- Hold advocacy meetings with departmental/local authorities and the Ministry of Health.
- Develop educational materials on IMCI for indigenous peoples.

Dengue

Achievements

- The National Integrated Management Plan for dengue prevention and control was updated in order to respond to dengue outbreaks. In addition, regional integrated dengue plans were prepared for endemic areas of the country.
- Officials trained in vector management are present in all regions of the country.

- Communication for Behavioral Impact plans have been implemented in Asunción, Alto Paraná, Central and Presidente Hayes.
- Regulations were standardized and a guide for municipal ordinances was developed.

- Preserve the pace and quality of the training provided through the Project.
- Improve surveillance for the detection of dengue cases at the local and regional levels.

Priority actions

- Improve the clinical care of dengue cases in health services.
- Continue training for effective and rational use of insecticide and complete it in the remaining regions (three departments).
- Research the situation of insecticide resistance.
- Develop an alternative management plan for unused tires.
- Proceed with human resources training to ensure a timely and efficient response.
- Ensure equipment and instruments are in place for a timely and skilled response.
- Institute national standards for dengue vector control.

Chagas disease

Achievements

- International certification of the interruption of the vectorial transmission of *Trypanosoma cruzi* by *Triatoma infestans* was obtained in the Eastern Region of Paraguay.
- A surveillance system for the interruption of Chagas disease transmission was established to facilitate situational analysis.
- Five community surveillance centers were established in the Central Chaco.
- The use of geographic information systems for vector control and entomological surveillance has helped to optimize the use of human resources and reduce operational expenditures for vector control.

Challenges

- Sustain the achievements made in the Eastern Region and maintain surveillance.
- Apply new surveillance tools that can identify risk factors associated with specific epidemiological situations in the Chaco region.
- Conduct insecticide susceptibility and resistance studies.

- Promote the establishment of a system for the diagnosis and etiological and chronic treatment and management of infected persons at the primary health care level.
- Prepare and disseminate national standards or protocols for the diagnosis, management, and treatment of Chagas disease.
- Ensure that Chagas disease is diagnosed during prenatal checkups at the national level and integrated with vertical surveillance.
- Make sure that actions are taken to comply with indicators, with a view to successfully interrupting transmission by transfusion.
- Promote compliance with mandatory weekly reports that classify cases of Chagas disease as congenital, chronic, and in pregnant women.

Priority actions

- Improve the medical care of Chagas disease patients.
- Scale up surveillance of the congenital disease to all regions of the country.
- Include the diagnosis and treatment of Chagas disease as a priority of prenatal checkups in family health units.
- Scale up prevention and control activities in the Paraguayan Chaco.
- Continue vector surveillance in the Eastern Region.
- Promote improved housing in indigenous communities.

Sexually transmitted infections (STI)

Achievements

- The Project facilitated the inclusion of STIs, and particularly the care of congenital syphilis, in the public health policy of the Ministry of Health.
- The Project successfully promoted a comprehensive and multisectoral approach for the elimination of congenital syphilis. The Project's experience with programming and implementation informed the design and subsequent implementation of the proposal prepared for the Global Fund.
- Activities for the prevention of STIs and vertical transmission of HIV and syphilis have been integrated into primary health care services. This will help to close the gaps in access, diagnosis, treatment, and monitoring of pregnant women and newborns.
- The number of services applying syndromic management increased with the addition of 144 family health units in eight regions of the country.
- Coverage of syphilis diagnosis (85%) and treatment (80%) of pregnant women increased in the Project's beneficiary services.

- 702 health workers trained in the syndromic management of STIs are present in seven regions of the country.
- The system for registering cases of syphilis in pregnant women was upgraded.
- A representative study was carried out on syphilis and HIV among postpartum women and sex workers.
- The experience and the positive outcomes obtained were transferred to regions outside the Project's target area and informed the design of a Project for the Global Fund, which was subsequently approved and is now in the implementation phase.

- The fragmentation of reporting and registration subsystems needs to be corrected and improved.
- Health services managers must take more ownership of the program to ensure the continuity of activities.
- The frequent turnover of trained human resources in health services detracts from sustainability and increases implementation costs due to the constant need to train new resources.
- Increase the coverage of STI detection to reach more than 95% of pregnant women.
- Increase the coverage of syphilis treatment in pregnant woman and include the treatment of her partner.

Priority actions

- Improve the clinical and epidemiological monitoring and follow up of newborns with congenital syphilis.
- Improve the access to clinical consultations for STI and prevention of mother to child transmission through family health units.
- Design health care approaches targeting adolescents and partners (of syphilis positive pregnant women) as part of the effort to eliminate congenital syphilis in the country.
- Strengthen prevention and promotion efforts for STIs, with an emphasis on syphilis.
- Include other STIs (such as chlamydia and gonorrhea) in the clinical care package.

Paraguayan Chaco Integrated Program Boquerón

Achievements

CIDA's flexibility in expanding the Project to include a population group of extreme need not
originally planned, which would receive comprehensive care in an integrated and culturally
appropriate manner. This avoided duplication of efforts in the training of human resources,
and ensured that they were sensitive to respond to cultural differences when providing care.

- Comprehensive activities in the areas of child health, tuberculosis, STIs, Chagas disease and priority sexual and reproductive health began in 2005 in the Health Region of Boquerón, taking into account the characteristics of the indigenous population in that region.
- The "Alma Chaquenian" Institute of Health of Boquerón was created and, in its first year of operations, introduced a program for technical nursing staff with a primary health care approach tailored to local conditions.
- Clinical IMCI courses were developed and integrated with STIs and Chagas disease for physicians and other licensed professionals, and auxiliary nursing staff.
- Health promoters and primary school teachers were trained in community IMCI.
- The information system for priority health programs improved.

- Ensure the exchange of teaching, education and management experiences between the health schools of Cochabamba, Camiri (Bolivia), and the Boquerón Institute of Health. The population of the Bolivian Chaco stands to benefit from this exchange by taking advantage of Paraguay's experience. Up to now, this exchange has been funded by a technical cooperation among countries Project (TCC).
- Ensure systematic supervision of priority clinical and community programs in the Chaco.

Priority actions

- Train National Institute of Health instructors for distance teaching of human resources in the Chaco.
- Strengthen and expand IMCI training and other priority programs in family health units to cover more than 1,000 planned units.
- Improve the intercultural aspect of training for the staff of regional hospitals that receive sick indigenous people, mainly in the Chaco region.
- Secure funding to ensure the sustainability of opportunities to share experiences in education, teaching and administration between the health schools of Cochabamba, Camiri (Bolivia) and the Health Institute of Boquerón.
- Strengthen the supervision of priority clinical and community priority programs in the Chaco.
- Strengthen the integrated health services network at all levels, based on family health units.
- Continue training and monitoring to strengthen family health unit teams and Project programs in the framework of the integrated care network.
- Systematic supervision and monitoring of all components must be maintained at all levels.

Project sustainability and lessons learned

Dengue

- Beginning in 2007, SENEPA developed a plan for institutional strengthening that gradually brings in additional human resources such as field operators, and technical and professional staff. The plan also includes the procurement of mobile medical supplies and working tools. An increase in human resources had already been observed by late 2009, and additional staff was hired in late 2010 with a budget approved by the National Congress.
- A Permanent Training Plan developed in 2007 to train SENEPA's human resources provides for the gradual incorporation of funding for certain courses in the institution's budget.

Chagas disease

- The program's strategic approach based on risk stratification for the control, contiguity, and continuity of spraying activities, and the comprehensive response of program officers to requests from the population, coupled with the local autonomy achieved by strengthening Control Service sectors in endemic areas, have made it possible to effect changes and implement activities efficiently.
- Dissemination of the process is the main strategy for ensuring the credibility, acceptance, and sustainability of its activities among service officials, local authorities and members of the target communities. In person consultancies and advisory services, technical assistance visits and the availability of guidelines and standards from the Southern Cone Initiative to Control and Eliminate Chagas Disease have played a critical role in cooperation between Southern cone countries and have also influenced national Chagas disease control policies and strengthened the technical capability of national entities and the training of local technical corps, through PAHO/WHO Project coordination.
- Strengthening local capabilities obviates the need to create independent program structures that would compromise the sustainability of the activities once the technical support has ended.
- Community leaders and local governments alike have asserted that the program's activities

 the information, the continuous involvement of the community through innovative, culturally appropriate strategies—have galvanized the community and control and surveillance activities.
- The initiative to provide information to the community laid the groundwork for local acceptance of subsequent activities, such as entomological surveillance and the training of leaders, and for community assimilation of the activities.





General achievements

- The Project targets for Chagas disease and dengue were met in their entirety. Similarly, 80% of IMCI targets were met, with the exception of the proposed targets for the community and supervision and monitoring components.
- Based on the outcomes obtained, all components of Project interventions have been scaled up. Project activities related to IMCI were scaled up to cover the entire country (national level), as well as other countries.
- Management and participatory planning processes were reinforced at the regional and local levels in Project areas.
- The competencies of operational and multidisciplinary health workers and community agents were improved in all Project components.
- Community participation and social mobilization around IMCI, Chagas disease and dengue was strengthened.

Integrated Management of Childhood Illness (IMCI) Strategy

Achievements

- The Project contributed to a reduction in infant mortality, especially deaths from prevalent childhood diseases.
- Comprehensive child health care was strengthened through human resources training, the incorporation of new contents (rights based approach, neonatal health, dengue, bartonellosis) and the provision of training materials.
- New methods and technology for strengthening health worker competencies were introduced: for example IMCI–ICATT (IMCI Computerized Adaptation and Training Tool).
- 9,742 health professionals (physicians, nursing and obstetrics staff, and nutritionists) were trained in the clinical and community components.
- Linkages were created between educational establishments: universities and institutes for higher education, as well as among local actors and families.

- Progress was made in the institutional assimilation of IMCI as a strategy for the implementation of comprehensive health care (MR 5062005) and the institutional and official adoption of the IMCI clinical component, and the community health workers guide with a rights based approach.
- IMCI trained facilitators are present in all the regions of the country.
- Sharing of experiences among Project areas and countries was accomplished through exchanges.
- The IMCI strategy was included in all areas of CRECER (the national poverty reduction strategy).

- Guarantee the systematic monitoring and follow up of trained staff.
- Ensure a continuous supply of materials and instruments.
- Continue and strengthen the training of regional and local instructors.
- Institutional assimilation and expansion of the ICATT.
- Scale up the assessment of the incorporation and implementation of IMCI in universities.
- Carry out operational studies to generate local and regional evidence for decision making.
- Ensure the transfer of responsibilities from regional to local government (national initiative currently underway).

Priority actions

- Officially adopt instruments for the monitoring and follow up of IMCI implementation at the first level of care (primary health care).
- Make sure that Project activities are included in local development plans: municipalities and regional governments.
- Strengthen competencies in regional and local management to ensure funds are allocated to meet national priorities for child health.
- Improve surveillance systems for perinatal and neonatal mortality.
- Accredit regional centers for the development of competencies in ICATT.

Chagas disease

Achievements

 Multidisciplinary teams with competencies in comprehensive and intersectoral approaches are in place for the implementation of priority actions for the control of Chagas disease (Tacna, Moquegua and Arequipa).

- An agreement was reached by the mayors (local governments) of districts infested with Chagas disease, the Ministry of Health and PAHO to prioritize prevention and control actions.
- Certification of the interruption of the vectorial transmission of Chagas disease was obtained in Tacna (2009) and Moquegua (2010), and the vectorial transmission was interrupted in the Hunter and Tiabaya districts in the Arequipa region.

- Sustain the achievements made through community surveillance in Moquegua and Tacna and achieve the interruption of the vectorial transmission of Chagas disease in Arequipa.
- Ensure the timely supply of inputs (insecticides) and the stability of trained human resources.
- Ensure the successful transfer of regional government responsibilities to the local level.

Priority actions

- Formal adoption of instruments to monitor and follow up on the prevention and treatment of Chagas disease at the first level of care.
- Ensure that Project activities are included in local development plans: municipalities and regional governments.
- Improve competencies in regional and local management to ensure funds are allocated to meet the national priorities for vector borne diseases (Chagas disease, dengue).
- Complete the control interventions in the remaining infested districts of Arequipa and maintain surveillance in Moquegua and Tacna.
- Conduct serological surveys in children under five years throughout the Macrosur region (Apurimac, Ayacucho, Huancavelica, and Ica).
- Promote operational studies on the oral transmission of the *T. cruzi* infection in the Amazon region.
- Integrate actions for the prevention and control of Chagas disease with a primary health care approach at the local level.

Dengue

Achievements

- The national plan for the Integrated Management of dengue prevention and control and the Andean subregional plan have been developed and implemented.
- Six communication for behavioral impact plans were implemented and dengue was included as a subject in the school curriculum in Tumbes and Loreto.
- Funds have been authorized for mobilization and rapid response support during outbreaks.

Challenges

• See the priority action section, below.

Priority actions

- Formal adoption of instruments to monitor and follow up on dengue implementation at the first level of care.
- Ensure that Project activities are included in local development plans: municipalities and regional governments.
- Strengthen competencies in regional and local management to ensure funds are allocated to meet national priorities for vector borne diseases (Chagas disease, dengue).

Project sustainability and lessons learned

- Ensure that results based budgeting (national initiative) includes funding for the activities planned for IMCI, Chagas disease and dengue.
- Promote the IMCI working group with the universities to incorporate IMCI into the curriculum.
- Strengthen linkages among the various cooperation agencies at the local and regional level.
- Encourage regional governments to sign letters of commitment to combat dengue.



525 Twenty-third Street, N.W., Washington, D.C. 20037, United States of America

ISBN: 978-92-75-13225-8

