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# TRIP REPORT

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 **BASICS**

PD-ABN-374

**ADVANCES TO DATE AND FUTURE  
CHALLENGES FOR CLINICAL  
TRAINING IN BOLIVIA**

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## ACRONYMS

ARI	Acute Respiratory Infections
BASICS	Basic Support for Institutionalizing Child Survival
CCC	Centros de Capacitación Clínica
CCH	Community and Child Health Project
CDD	Control of Diarrheal Diseases
COSMIL	Military Medical Services
DNSNMN	Dirección Nacional de Salud y Nutrición del la Mujer y del Niño
DTU	Diarrhea Training Unit
EPI	Expanded Program on Immunization
IMCI	Integrated Management of Childhood Illness
NGO	Non-governmental Organization
ONG	Organización No-gubernamental
OPS	Organización Panamericana de Salud
PAHO	Pan American Health Organization
PRITECH	Primary Technologies for Health Care Project
SNS	Secretaría Nacional de Salud
USAID	United States Agency for International Development

## **EXECUTIVE SUMMARY**

In the course of the past three years clinical training centers (CCC) have been successfully established in three Bolivian hospitals and are in different stages of development in several others. Though a complete network of regional training centers, as originally envisioned, has not yet been achieved, the existing centers have proved capable of sustained training and have modified course content to incorporate elements of integrated care. The Secretaría Nacional de Salud (SNS) at the national level has provided coordination of participant selection and donor financing for training, but staff reductions at the central level raise questions as to the ability to continue to service an expanding network of training centers.

The inability to date to establish a network of regional training centers has placed the burden of training from all regions on the three existing centers. This has limited the ability of training centers to work more closely with regions on implementation and evaluation of clinical skills introduced through training. Given the large training demand, the transient nature of a significant part of the regional professional staff, and the unlikelihood of a significant increase in training capacity, national and regional training strategies should be developed that: 1) prioritize which staff are to be trained in training centers; 2) how training will be replicated at the area level for personnel not identified for hospital based-training; and, 3) how implementation of new clinical skills will be supported with regional logistics and supervision.

As current training efforts are completely dependent on continued donor funding, the above mentioned strategies should also include impact evaluations for both hospitals and regions designed to document savings realized through improved clinical practice. Demonstration of cost/benefit analysis will be necessary to assure continued donor support and/or justification for future funding of training by municipalities.

Given the reduced role of the central level of SNS under decentralization, it is unrealistic to expect it to sustain the burden of coordination of this effort. Regional entities with representation from SNS, hospitals, Pediatric Society, and donors will be required for successful implementation. An informal working group with similar composition has been involved since the outset in promoting the CCC initiative at the national level. A more formal working group could play a key role in providing the national framework within which the regional strategies are both developed and implemented.

## **INTRODUCTION**

This report examines the development in Bolivia of training centers for clinical case management, the current status of these centers, and the implications this may have on the planned implementation of a training strategy directed at advancing the integrated management of childhood illness. Though it is important to note the significant gains that have been made in establishing the centers, it is equally important to identify what efforts have been less successful.

Both will need to be taken into consideration by those who hope to replicate this experience or build upon it.

There are three principal audiences for this report in Washington:

- 1) **USAID/Washington, which has played an active role with the Bolivian USAID Mission, BASICS, and the USAID bilateral project CCH.** USAID has expressed concerns that previous training efforts in Bolivia have been too focused on urban areas and on physicians at the expense of rural areas and those health workers providing service at the community level.
- 2) **BASICS/Washington, which has supported the concept of CCC both for the experience they provide in hands-on clinical case management and as a potential vehicle for the incorporation of the results of ethnographic surveys and operations research.** The principal concern of BASICS/Washington has focused more on the flexibility of the model, its adaptability for different levels, its responsiveness to cultural differences, and its viability as a vehicle for the translation of study results into training objectives. Though interest in CCC is now also based on their potential in terms of Integrated Management of Childhood Illness (IMCI), support in the past was justified in terms of the ability to respond to the above mentioned concerns.
- 3) **The Support Group for the IMCI initiative, which is looking to Bolivia, along with Brazil, the Dominican Republic and Peru, as an early adaptor country.** The CCC began with integrated ARI/CDD training and have incorporated additional elements of integrated care into the curriculum. The fact that this effort has been sustained and expanded over three years provides a valuable experience and raises important issues that will need to be addressed in countries proposing to adopt the IMCI initiative.

There are also several audiences for this report in Bolivia. Though the issues raised here have been discussed with most individuals and groups which have been part of the CCC development process in Bolivia and represent little new knowledge for them, it is hoped that by identifying a number of the issues that need to be addressed, this may serve as a further stimulus to the working groups to more clearly define what strategies will be needed to consolidate current efforts and expand upon them.

## **BACKGROUND**

Though it is difficult to fix an exact point in time when this initiative began, it is possible to identify three interested groups and a generalized dissatisfaction. Their dissatisfaction with the way principal childhood diseases were being managed in pediatric patients extended to the existing strategies for improving this management. The dissatisfied groups consisted of the Maternal Child Health Division of the SNS whose duty was to provide the technical guidelines

and encourage rapid adoption; the Interagency Committee which provided much of the technical assistance related to childhood diseases, as well as much of the financial support for training; and, the hospitals themselves, where interest in further reducing the level of mortality for pneumonia and diarrheal disease was high. At the same time there was a recognition that traditional classroom instruction in the national norms for these diseases had not measurably changed practice. This was confirmed both by a study carried out by PRITECH following large-scale national training in cholera and diarrheal disease norms, and a 1992 evaluation of case management practices carried out by the national ARI program.

In Bolivia, as in much of Latin America, there had been considerable experience in diarrhea training units (DTUs). This consisted of hospital-based training in the preparation and administration of oral rehydration solutions. These units were seen as providing training for personnel based in the hospital as well as other facilities, who in turn would provide training to mothers and other caregivers. In most countries these units were a mixed success and it proved difficult to extend the appropriate management of diarrheal disease beyond these units into the rest of the hospital. After an initial burst of enthusiasm it was often difficult to maintain interest in these units and throughout Latin America many closed.

One of the principal stimulants to establish clinical training centers (CCC) in Bolivia came with the change of administration which followed the elections of 1992. President Gonzalo Sanchez de Lozada's administration began with a significant restructuring of governmental institutions, which involved both decentralization and increased popular participation, plus the development of sectoral plans. Plan Vida, the plan for the health sector, proposed as one of its goals the reduction of perinatal and child mortality by improving institutional responsiveness and guaranteeing the quality of service provided to this age group.

In May 1993 a workshop was held for representatives from the tertiary care hospitals and other levels of the national health network to discuss their experiences and define strategies for improving services. One of the proposals that came out of this workshop was for the establishment of an accrediting commission (with participation from the SNS, the Bolivian Pediatric Society, and cooperating international agencies) which would oversee the accreditation of hospitals that wished to set up training units, and that met certain criteria. The purpose of the accreditation process was defined as: estimating the degree to which the institutions were functioning as proposed in their applications; observing diagnostic and treatment practices for ARI and CDD; and, detecting and describing obstacles encountered in attempting to apply standardized procedures.

The prerequisites for participation were:

- 1) Hospitals or pediatric services that had a sufficient number of out-patients and in-patients with the pathologies to be studied, and that had a functioning oral rehydration unit;

- 2) That a standardized project proposal had been submitted to the SNS identifying training experience;
- 3) That a training team had been established and had formally agreed to take responsibility for applying national program norms as well as teaching and directly monitoring students;
- 4) That the service or hospital had designated a technical coordinator and an administrative unit;
- 5) That the service or hospital had a regular supply of essential drugs; and,
- 6) That in terms of infrastructure the service or hospital have: a classroom; didactic material; bibliography; TV and video; other audiovisual material; and, a documentation center.

An organizational guide was provided by the Departamento de Salud y Nutrición del Niño, which walked the hospitals through the process of preparation and application, and the Interagency Committee facilitated the accreditation process. In June of 1995 a process evaluation was carried out to assess the evolution of the initiative. This evaluation also attempted to measure the degree to which hospital based clinical practice had improved.

## **THE CURRENT SITUATION**

### **Coordination**

The coordination of the CCC initiative has largely been carried out by the Dirección Nacional de Salud y Nutrición de la Mujer y del Niño (DNSNMN). Dr. Miriam López and, more recently, other DNSNMN personnel have interacted directly with the regions, donors and hospitals. Agreements have been made with the regions as to which staff will be trained, funding has been requested from donor agencies for these staff to cover tuition, travel and per diem expenses, and hospitals have been contacted to prepare for beginning training on agreed dates. Though it was envisioned that there would be a more direct relationship between the hospitals and regions from which trainees were drawn, the limited numbers of CCC and the need to send personnel from a variety of regions to the two CCC in La Paz has placed an increased coordinating burden on the DNSNMN.

### **Participation of Hospitals**

At the time of this consultant's visit there were three CCC in operation with hopes for opening at least three more. The first training center to open was the **Hospital Obrero in La Paz**, which had its original proposal approved and began training on June 24, 1994. This was followed by

the **Hospital del Niño, in La Paz**, which began training August 1, 1994; and, most recently, the **Hospital Mario Ortiz in Santa Cruz**, which began training September 1, 1995.

Other hospitals, which have sent proposals or expressed interest are:

- 1) **Hospital German Urquidi in Cochabamba.** This hospital is the one in which there has been the greatest degree of both involvement and frustration. Training of hospital staff in anticipation of becoming a CCC began in 1993 and there have been repeated visits of individuals and commissions attempting to encourage the establishment of a CCC since then. Yet another set of visits took place during the course of this consultant's assignment. The lack of a training center in Cochabamba has meant that regional staff from this extensively populated zone have to be transported to La Paz or Santa Cruz for training, greatly increasing the cost.
- 2) **Hospital Japonés in Santa Cruz.** The Japonés in Santa Cruz has attempted to join the CCC initiative, though it has operated somewhat independently in the past and has recently been through a rough transition period. Potential leadership for the CCC has been identified, but it is not clear if hospital staff is supportive.
- 3) **Hospital Santa Barbara in Sucre.** Santa Barbara in Sucre is likely to be approved as a CCC in the near future. This would provide an important regional training center in support of work being done with UNICEF in Potocí.
- 4) **Hospital San Juan de Dios in Tarija.** San Juan de Dios in Tarija is currently experiencing staffing difficulties and it is not clear whether it will be able to meet the existing prerequisite criteria.

#### **Organization and Administration of CCCs**

The organization and administration of the existing CCC vary considerably and follow three distinct models. The Hospital del Niño has had the same director since it was established. This director is supported by a coterie of trainers, who comprise part of the hospital staff and who have clearly defined roles and a high degree of involvement in training.

In the Hospital Obrero, the directorship and the primary responsibility for coordinating training is rotated among a number of individuals. There is broad, but more limited, participation by all staff in the pediatric unit.

In Mario Ortiz the directorship is a full-time, donor-financed position which coordinates courses and the participation of trainers. In this case the trainers, though related in some degree to the hospital, are often not hospital staff, and they are organized into two teams which alternate giving the course. Under this system trainers appear to have a more limited role and more occasional participation.

All three institutions are provided with a stipend of \$30.00 per trainee. Part of this money is used for materials and other trainee expenses while the remaining funds can be used at the CCC's discretion. As the funds are limited, they have generally been used to purchase subscriptions to pediatric journals; to help defray the cost of staff participation in pediatric conferences; or cover other needs of the pediatric unit. By and large the CCCs seem to operate within the context of the pediatric unit and remain separate from overall hospital administration.

### **Selection of Participants**

Selection of participants seems to obey a number of different criteria. Donor agencies working in specific regions are interested in seeing staff from those regions trained. NGOs working with medical and nursing personnel in their year of provincial service are anxious to have these people trained before they enter service. The SNS is interested in seeing personnel from allied agencies such as the military medical services (COSMIL) trained, as this could encourage the adoption of program norms. Given this broad and defuse demand, and the limited human resources available for coordination at the DNSNMN, it has been difficult to maintain clear criteria for prioritization of participants.

It is clear that if the skills acquired in the CCC are to be put into practice, a significant degree of preparation must be done in terms of supplies, supervision, and other areas. However, there are no clear criteria applied as to what needs to be in place in a given area or district prior to its personnel participating in training.

### **Methodology**

The current methodology applied in all three CCC is a combination of a review of the theory that supports ARI/CDD program norms and the application of these norms in clinical practicums within the hospital ambulatory care and in-patient wards. This is supplemented with discussion of childhood nutrition, breastfeeding, vaccination, the use of the health card and the importance of counseling skills. There is a fair amount of role playing and other group dynamics especially focusing on non-verbal communication and attempting to get the clinicians to see how their behavior can be perceived by mothers.

The methodology generally followed by the CCC at Hospital del Niño has been put into a more concrete version in a draft facilitators manual with support from CCH and BASICS. This is currently being reviewed and is expected to be shared with the other CCC for comment.

### **Curriculum**

The curriculum for the CCC course is largely based on the manuals containing the program norms for CDD and ARI. These are supplemented with other supportive materials on EPI, nutrition, breastfeeding, and the child health card. A more formal draft curriculum with learning

objectives and guides for the practicums has been prepared with the CCC at Hospital del Niño and is expected to be shared with the other centers.

### **Evaluation and Monitoring**

A process evaluation of the CCCs was carried out at the hospital level in June 1995 under the auspices of the DNSNMN. Though the primary focus was on the degree to which the evolution of the CCCs had progressed, the appropriateness of care within the hospital was also examined. This evaluation did not extend to graduates of CCC training practicing outside the hospital setting, but recognized the need for such an evaluation. Instruments appropriate for such an evaluation were later developed by Dr. Dilberth Cordero of BASICS and field tested in Santa Cruz in December 1995. This field test provided important feedback to the CCC in Santa Cruz, but also identified the difficulty of assuring cases of the pertinent pathologies to observe in the field.

Personnel from all CCCs expressed the desire for evaluating the impact of training in the field. Recent analysis by OPS of variance between clinical norms and prescribing practices in the hospitals with CCCs demonstrates the need for ongoing evaluation at the hospital level as well.

### **Finance and Sustainability**

At present, the operation of the CCC is completely dependent on the financing provided by the donor agencies. UNICEF has provided the largest proportion of funds. USAID through CCH has financed the participation of personnel from the districts where its project is operating while OPS has made use of cholera funds to support participation as well. Though there has been some discussion of the possibility of municipal financing for training in the future, there is no current plan for this transition and continued training is completely contingent on continued donor funding.

### **Equipment, Supplies and Other Support**

Given the decentralized nature of the SNS it is difficult to say to what degree the necessary drugs, timers, supervisory support and other elements necessary for successful application of training are in place in each of the regions. A common complaint of those graduating from CCC courses continues to be the lack of necessary resources. During this consultancy field visits were only made to areas currently included in the CCH project. CCH staff are aware of the importance of the variety of inputs necessary to assure application of improved practices following training. In districts where these efforts have been made, the CCC experience has been successfully replicated at the local level and significant changes have been realized. In other districts replication of the week long CCC training has been reduced to a two hour lecture for auxiliary nurses which has, predictably, produced limited results.

## **PRINCIPAL ACCOMPLISHMENTS**

### **Maintained and Expanded Initiative**

Perhaps the principal accomplishment to date is that the parties involved have been able not only to maintain but to expand this effort over the past three years. This is a major achievement which took considerable and sustained efforts.

It should be noted that what appear to have been some of the key elements to success were pre-existing. The hospitals had previous experience orienting medical students or carrying out continuing education for professionals. The establishment of the centers, however, and the continued investment of staff time in training non-hospital personnel, went well beyond previous experience and demonstrated enormous dedication.

It should also be noted that the Interagency Committee had a long history of collaborative efforts in health. It is one thing, however, for agencies to come together at a given point in time to support a particular activity, and quite another to demonstrate the degree of continuity, flexibility and selflessness they have shown in support of this initiative.

### **Three Functioning CCC**

The fact that there are three national centers, each with the capability to provide a week of quality training and hands-on experience to groups of approximately ten health professionals every other week, is a considerable accomplishment. Rather than suffer a gradual decline as inertia set in, the different groups and individuals involved in this initiative have been able to maintain momentum and expand upon their early success.

### **Many Key Personnel Trained**

A significant consensus of support for this initiative has been built through the participation of a considerable number of medical professionals in training courses. Much of the current demand at the regional level has been stimulated by former participants.

### **Broader Application of Program Norms**

One of the primary motivations for SNS support for this initiative appears to have been the opportunity it provided for dissemination of program norms beyond the traditional audience at the health post/health center level. In many countries both hospitals and other institutional providers such as Social Security or peri-statal have been resistant to guidance on clinical practice from normative programs. The strong theoretical and research support for the current training has helped to overcome this resistance and has provided important exposure for representatives from these providers to the rationale behind program norms for CDD and ARI.

## **LIMITING FACTORS**

### **Coordination**

A principal role in the coordination of available financing and potential candidates for training has been taken on by the SNS at the central level. Given the number of potential sources for both candidates and funds, and the lack of CCCs in every region, this has had a certain logic to recommend it. Over time however, the human resources at the central level of the SNS have been reduced, the sources of funding have been reduced, the relative role of the regions has increased, and the sources of demand for training have increased. The proposed increase in the number of CCC will further augment the need for coordination at a time when the SNS will be hard pressed to respond.

From the beginning of this initiative it was recognized that there would need to be some entity which provided additional technical support. This was first envisioned as an accreditation committee, with participation from the SNS, the Pediatric Society, and the donors. Though a number of the same individuals have been consistently involved over time in different combinations to address issues related to the CCCs, and later the integrated care initiative, there is no formal structure which is systematically looking at these in strategic terms. The climate of constant turnover and the need to respond to political pressures does not encourage long term planning at the SNS. In the absence of a working group with a strategic plan, a short staffed SNS is more likely to make ad hoc decisions which may negatively affect the functioning of the CCCs and the adoption of IMCI.

Part of the initial impetus for central level involvement in the CCC was to extend acceptance and application of program (ARI/CDD) norms. This goal has been well advanced by hospital and other institutional participation (Caja, ONG, COSMIL, etc.). The effort to expand the constituency for program norms has been a factor in determining training participation. Another factor has been the need to orient those with managerial or supervisory responsibility.

The lack of a clear implementation strategy has often meant that everyone was exposed to basically the same training. This includes hospital staff who were expected to participate as trainers, hospital staff who were not expected to participate as trainers or see patients but were expected to be familiar with the initiative, managerial and supervisory personnel from various institutions, physicians and nurses participating in their provincial year of service, and auxiliary nurses.

Although this has advanced the development of a consensus as to the appropriateness of program norms and the concept of integrated care, it has also meant that the numbers of providers trained has been limited and many of those providers trained can be expected to leave the SNS system soon. This has negative implications for the training of more stable staff, which attend most rural pathology. At the current rate auxiliary nurses are being trained, it would take almost ten years to train them all.

Both the realization of the limits on numbers of people who can be trained in the CCC and the encouragement of those who have participated to replicate the experience has raised a number of issues. These include:

- 1) It cannot be assumed that the conditions will exist for application of practices learned at the CCC once personnel return to their districts. There must be a concerted effort at assuring sufficient equipment, supplies, and appropriate supervision and follow-up.
- 2) There is a desire to replicate the experience of the clinical training and begin integrated care within districts more quickly than the time it will take all staff to be trained in CCCs.
- 3) The current methodology is designed to train clinicians to improve practices, not to train them to replicate the training.

### **Participation of Hospitals**

The degree to which the case management practices of the CCC have been incorporated into case management practices in their respective hospitals appears to vary. This was confirmed in a recent OPS analysis of hospital records from 1995 relating ARI diagnosis and treatment practices. There is a mutually recognized need to increase internal monitoring to assure practice norms are observed.

The difficulties encountered in dealing with ARI and CDD are likely to multiply as the CCC move further into integrated care. Issues such as how outpatient units are organized and the availability of vaccines need to be addressed. The establishment of the CCCs for ARI and CDD did not place a significant burden on hospital administration and should provide some tangible cost savings for them. Unless these can be clearly documented however, hospital support for some of the changes implicit in IMCI should not be assumed.

### **Organization and Administration of CCCs**

Part of the success to date of this initiative has likely been the flexibility allowed to the hospitals in how they organized themselves to respond. If more CCC come on line, there will be a natural tendency on the SNS to be more rigid, and to pass an increased administrative burden onto the hospitals. This tendency should be resisted. The current incentives do not provide much compensation and the balance could easily tip against participation.

One thing that does need to be addressed is accounting for funds provided to the CCC for tuition. There are no guidelines at present, and the possibility of future guidance being applied retrospectively, or an audit not encountering the kinds of records needed, could have negative implications for those who have assumed responsibility for these funds.

It is also not clear who in the SNS has oversight responsibility for the centers or what oversight responsibilities should include.

### **Selection of Participants**

In theory participants are being selected at the regional level within the context of a regional implementation plan and based on certain criteria, a principal one being that they are treating pediatric patients. In some cases this is true, in others less so. A number of different criteria are being applied, for a variety of different motives, but not in response to a clear strategy.

At the central level of the SNS the exact persons to be trained at the regional level cannot be identified. Part of this is due to the revolving nature of the positions held by doctors and nurses doing their year of provincial service. These constitute the vast majority of professional positions in rural areas and a significant part of the lower level management positions. There are other positions which are assigned to one site though the person who holds that position is actually someplace else. There can also be significant turnover unrelated to the rotating provincial year positions. The net result is that the true target population to be trained in any one region cannot be clearly identified at the central level.

At the regional level the motivation for selecting candidates for training may respond to different criteria. Regional managers have few incentives to provide their staff, and a training opportunity with per diem may be used to reward an outstanding staff member who actually has no role in clinical care. Participant selection cannot be left purely to the region to decide. There needs to be a clear understanding with the region as to:

- 1) How each participant fits into the larger implementation strategy;
- 2) How supplies can be assured upon return;
- 3) How follow-up monitoring and evaluation will take place; and,
- 4) How the training experience is to be replicated

Selection criteria will need to be determined within the context of the larger debate about the implementation strategy. Existing, and even anticipated training facilities, will not be able to accommodate the numbers of people to be trained. This means that at some point differentiation will need to be made between those to be trained in clinical skills in the CCC, those to be trained to train outside the CCC, and staff to be trained at the area level while waiting eventual training in the CCC.

### **Methodology**

This also depends on the outcome of the previous discussion. The current methodology is based on the assumption that participants are drawn from those in clinical practice who will return to clinical practice after training. This is not necessarily the case at present. The existing methodology does not address the need for participants to replicate their experience within the

area upon their return, though this is clearly the expectation of some regions in selecting participants. If all personnel are expected to participate in CCC training it could well take ten years to implement this initiative. The likelihood of maintaining an initiative this long, given the reality of changing priorities with the SNS and donors, is limited.

In the interim, the draft curriculum and facilitators guides that have been drafted are extremely useful and should be shared and discussed with the other training centers. Now that they have more experience in training, the trainers might benefit from a training skills workshop done in an off-week in the hospitals. This might include work on preparing training materials, which was a need expressed by many of the trainers.

Major changes in content should wait until modifications are made for IMCI.

### **Curriculum**

Here the case is similar to the above. Once the changes are made, more formal curriculum, facilitators guides, and audio-visuals should be developed. This will help reinforce norms and keep people focused whose participation as trainers is not that frequent. This will be even more important in the newer CCCs with less experience.

### **Evaluation and Monitoring**

Everyone recognizes the need to strengthen this. CCCs need feedback but it is not practical for trainers from this level to participate in site evaluation because of cost and limited possibility to observe actual care. The burden of supervision should logically fall on the region and be part of the selection process. The problem here is that regional and area supervision is not focused on clinical care.

Good instruments for evaluation have been developed but their application needs to be negotiated with the Regions. This would be a good point of encounter between the trainers at the CCC and local supervisors and would provide some feedback while sensitizing each to the other's needs.

### **Finance and Sustainability**

As mentioned earlier, at present the operation of the CCC is completely dependent on the financing provided by the donor agencies. Though there is a continued commitment on the part of the donors to this initiative, it would be unrealistic to expect this to continue indefinitely. OPS has already exhausted one of its principal sources for support, and other donors can be expected to be reexamining their commitments given overall reductions in donor budgets.

The ability of this initiative to continue to attract funds, either from the donor agencies or eventually from the municipalities, will be based on the degree to which it can demonstrate

results. The assumption that training will provide not only improved care, but that it will substantially reduce the prescription of inappropriate drugs, needs to be clearly demonstrated. The recent analysis by OPS of prescribing practices in those hospitals with CCC shows the need for urgent action.

## **CONCLUSIONS**

### **CCCs a Success Story**

The history of this initiative in Bolivia should provide guidance and encouragement to other countries seeking to replicate the experience. Much of the success can be credited to individuals with formal or informal roles that transcended the boundaries of the particular institution with which they happened to be associated. There is a high degree of shared experience among the different actors, and many years of shared struggle to improve the care provided to children.

There is a lot of work that remains to be done, but one cannot help but be inspired by the self sacrifice and dedication shown by those involved in the success of this effort.

### **CCCs a Cautionary Tale**

The history of this initiative in Bolivia should also serve as a cautionary tale for all involved in the IMCI initiative. The preconditions for the successful establishment of CCC were greater in Bolivia at the outset of this initiative than they are or will be in many other countries. Even so, the task proved daunting and continues to require a significant effort to sustain it. The assumption of a continuing concert of interests between central ministry management, regions, hospitals, and donors is a dangerous one to make. As the focus moves beyond the CCC to what resources will be needed for implementation, the debate may sharpen.

Three years into this initiative there are three hospital based CCCs capable of providing part of the training contemplated under IMCI. There is not, however, a clear strategy on implementation beyond training, and the training methodology has not been modified to adapt to the reality of fewer CCCs than anticipated. The bulk of the effort is still ahead.

## **RECOMMENDATIONS**

### **Formalize Coordination Unit**

The Bolivians involved in this effort are in a better position than anyone else to determine how they are best organized. Though this effort has been supported all along by an informal working group drawn from the various institutions involved, convocatory power and the authority behind decisions has resided with the SNS. Continuing changes in SNS leadership, reduced staff, plus

the additional pressures that can be anticipated in an election year would seem to argue for a new look at how strategies are to be defined and resources allocated. One possible solution could be a formalization of the working group with SNS participation. This might serve to assure greater continuity for this initiative during a change in government.

### **Develop Regional Implementation Strategies**

There is a need for regional implementation strategies to provide the context and prioritization for training. Though ideally all regions should be in a position to participate, the inability of any one region to develop a plan should not hold the others hostage. Priority should be given to those regions which are able to assure the other inputs that will be necessary, in addition to training, to put improved clinical skills into practice.

### **Document Achievements**

The hospitals and regions involved in this initiative must be able to demonstrate that training results in reduced costs for inappropriate drugs or it will be very difficult to justify continued funding. Evaluations should be designed with the marketing of the results in mind. Target audiences at a minimum would be donors, new SNS officials, and municipalities. Hospitals such as Obrero with a defined staff and patient population could provide an excellent laboratory for the development of appropriate models.

In the current climate of reduced resources, the CCCs will need to point to results more tangible than improved care. If they are unable to demonstrate cost savings, it will also be hard to justify to their own hospital administrators the need for additional expenditures which can be anticipated with IMCI.

**APPENDIX**

## Appendix: Documents Consulted

1. Procedimientos de Acreditación de los Centros de Capacitación, Clínica en Infecciones Respiratorias Agudas y Diarreas.
2. Centros de Capacitación Clínica IRA/EDA, documento elaborado por: Dra. Miriam López Barrón.
3. Propuesta para un Centro de Capacitación Clínica.
4. Plan de la Unidad de Capacitación, Hospital Materno Infantil "German Urquidi", preparado por: Dr. Alfredo López, Dr. Nelson Vega, Dr. Antonio Espada, and Dr. Eduardo Zegarra.
5. Centro de Capacitación Clínica IRA-EDA, Hospital "San Juan de Dios", preparado por: Dr. Raúl Díaz Sossa, Dra. Olga Quiroga León.
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