Calidad en Salud

Better Health for

Women and Children

End Of Year Report, 2003

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Table of Contents

Anexos

Acronyms

AA-MC	AIEPI AINM-C, Manejo de Casos
AA-PP	AIEPI AINM-C, Promoción y Prevención
ACCEDA	Atender, Conversar, Comunicar, Encaminar, Describir y Acordar próxima cita
AEC-ONG	Ampliación de la Extensión de Cobertura en Organizaciones No Gubernamentales
AEC-PS	Ampliación de la Extensión de Cobertura en los Puestos de Salud
AIEPI	Atención Integrada a las Enfermedades Prevalentes de la Infancia
AINM-C	Atención Integrada al Niño y la Mujer a Nivel Comunitario
AMMG	Asociación Guatemalteca de Mujeres Médicas
ANDEGUAT	Asociación de Nutricionistas de Guatemala
APROFAM	Asociación Pro-Bienestar de la Familia
AQV	Anticoncepción Quirúrgica Voluntaria
ATR	Asesor Técnico Regional
BRES	Balance, Requisición y Envío de Suministros
CC	Centro Comunitario
CONAPLAN	Comisión Nacional de Promoción de la Lactancia Materna
CPT	Contraceptive Procurement Table
CRS	Catholic Relief Services
CS	*Calidad en Salud*
CTA	Comité Técnico Asesor
CYP	Couple Years Protection
DAS	Dirección de Área de Salud
DHS	Demographic Health Survey
DGRVCS	Dirección General de Regulación, Vigilancia y Control de la Salud
EA	Enfermera Ambulatoria
ENSMI	Encuesta Nacional de Salud Materno Infantil
ETIO	Equipo Técnico de la Investigación Operativa

FA	Facilitador de Área
FC	Facilitador Comunitario
FHI	Family Health International
FI	Facilitador Institucional
FNUAP	Fondo de las Naciones Unidas para la Población
FP	Family Planning
GETSA	Gestión en Tecnología en Salud y Desarrollo
GMP	Growth Monitoring and Promotion
GTI-IEC	Grupo Técnico Interinstitucional de IEC
IEC-BCC	Información, Educación y Comunicación – Behavior Change Communication
IGSS	Instituto Guatemalteco de Seguridad Social
IMCI	Integrated Management Childhood Illness
IPC/C	Interpersonal Communication and Counseling
IUD	Intra-Uterine Device
JHU	Johns Hopkins University
KPC	Knowledge Practices and Coverage
LMIS	Logistics Management Information System
MA	Médico Ambulatorio
MELA	Método Exclusivo Lactancia Amenorrea
MEW	Minimum Expected Weight
MIC	Manejo Integrado de Casos
MOH	Ministry of Health
MSPAS	Ministerio de Salud Pública y Asistencia Social
NGOs	Non-Governmental Organizations
OR-AEC-PS	Operations Research
PAHO	Panamerican Health Organization
PEC-ONG	Ampliación de Extensión de Cobertura en Organizaciones No Gubernamentales
PEVA	Planear, Ejecutar, Verificar y Actuar

PNI	Programa Nacional de Inmunizaciones
PNSR	Programa Nacional de Salud Reproductiva
PNUD	Programad e las Naciones Unidas para el Desarrollo
POA	Programación Operativa Anual
PROEDUSA	Programad e Educación y Saneamiento
PROSAN	Programa de Seguridad Alimentaria y Nutricional
RRHH	Dirección de Recursos Humanos del MSPAS
SAMIG	Sistema Automatizado de Monitoreo Institucional y Gerencial
SDM	Standard Days Method
SEPREM	Secretaría Presidencial de la Mujer
SIAS	Sistema Integral de Atención en Salud
SIGER	Sistema de Información Georeferenciado
SIGSA	Sistema de Información Gerencia len Salud
SLAN	Sociedad Latinoamericana de Nutricionistas
SUI	Sistema Unificado de Información
TA	Technical Assistance
TOT	Training of Trainers
TSR	Técnico en Salud Rural
UE	*Unidad Ejecutora*
UNDP	United Nations Development Programme
UNICEF	Fondo de las Naciones Unidas para la Infancia
UNFPA	United Nations Fund for Population Activities
UPS1	Unidad de Provisión de Servicios I
URC	University Research Corporation
USAID	United States Agency for International Development
URGE	Unidades Regionales de Apoyo a la Gestión
USME	Unidad de Supervisión, Monitoreo y Evaluación
UTI	Uterine Tract Infection

VS	Vigilante de Salud

1. EXECUTIVE SUMMARY

1.1. Result 1: Increased Use of Maternal Child Health Services Provided by the MSPAS and Associated NGOs

1.1.1. Family Planning

2003 has been another year of great achievements for the program at all levels of the public health structure. The objectives of family planning (FP) were to increase access, quality, demand, and use of services at all service levels (hospitals, clinics, community) and NGOs. This strategy includes: the officialization of the reproductive health program, revision of norms, organization of the *Programa Nacional de Salud Reproductiva* (PNSR), delivery of services, development of training methods and materials, training of providers and community workers, and the provision of critical support services such as logistics, monitoring and supervision-facilitation. During 2003, some 3,162 service providers were trained (246 in hospitals, 2,063 in clinics and 215 at the community level). The FP component works in hospitals to provide temporary and permanent (AQV) FP methods, and in health centers and posts to provide temporary FP methods. Expansion of FP to the community level began with the training of TSR, MA and FI, and will continue through 2004 with the involvement of *Vigilantes*, health promoters, community facilitators and Traditional Birth Attendants (TBAs). *Calidad en Salud's* family planning team has worked with the MSPAS, IGSS and certain NGOs/PVOs to create unified objectives, technical norms, strategies and materials. A major effort is in progress to design and institutionalize effective support systems as a means to ensure service improvement, political support and funding on a long-term, sustainable basis.

This year also saw an important adjustment and dissemination of the national FP norms which focused on eliminating medical barriers thereby improving clients' access to services. Most of the medical barriers that were eliminated were obsolete or unscientific requirements, which hindered both, access to and desire to accept FP methods. The FP norms book incorporates state-of-the-art information for each method. The updated version removes barriers that hindered access to services; for example, there is no longer a norm that requires families to have a certain number of children or age to access permanent methods (surgical contraception). Furthermore, the MOH approved auxiliary nurses to become providers of intrauterine devices (IUDs) a method that used to be performed by physicians only; this single decision will permit thousands of women to access this method. In addition to these advances, the Surgical Contraception Manual was updated and most hospitals countrywide now include surgical contraception as part of regular maternal and child health services offered by the Ministry of Health (MOH). Presently, 36 hospitals around the country are able to provide Female Surgical Contraception.

The quality of services was also improved by the provision of 78 IUD insertion kits to 78 health centers and 60 AQV minilap and 14 vasectomy kits to 37 hospitals. Moreover *Calidad en Salud* provided a complete set of clinical room equipment to 18 Hospitals and 60 health centers in order to implement the FP services. In hospitals, the provision of surgical equipment coincided with instruction in service delivery and has enhanced provision of services.

The methods offered at the community level were expanded by developing training materials for outreach workers and by proposing uncomplicated methodologies for family planning options available on hand by unpaid health personnel. At the same time strong IEC campaigns related to family planning have generated demand on the part of the well-informed customers.

Finally, the logistics component achieved improvements in the supply levels of contraceptives, thereby contributing to an improved ability to meet the demand for methods all the way through the network services delivery points.

CYPs

Nationwide

As of December 30th, 2003, 103% of the annual target for CYP had been achieved, 103.6% for the MSPAS and 100.7% for IGSS. The MSPAS's cumulative percentage for CYP is 3.6 percentage points above the goal while IGSS is 0.7 percentage points below its target for CYP. These data include December's available data. In some areas as much as 61% of new acceptors are selecting injectables.

Table 1 - Number of CYPs nationwide by target achieved, MSPAS & IGSS, 2003

Nationwide	Target 2003	Achieved	%
Total	390,076	401,249.5	102.9%
MSPAS	290,076	300,539.5	103.6%
IGSS	100,000	100,710.0	100.7%

Priority areas (8)

The level of CYP achieved in the eight priority areas is the same as the remainder of the country. The annual target was surpassed by 3.6%. The increase in CYP in the 8 priority areas is related to improved advertising and the provision of FP methods in health centers and posts, compared to other areas where FP efforts are just getting underway and *Calidad en Salud* project resources are less.

Table 2- Number of CYPs in 8 priority areas by target achieved, MSPAS, 2003

Priority Areas (8)	Target 2003	Achieved	%
MSPAS	93,357.00	96,690.9	103.6%

MSPAS

The increase in CYP for the MSPAS is accounted for by a more than seven-fold increase in injectable acceptance (from 19,602 in 1999 to 138,387.8 in 2003). It represents 46.0% of the total CYP, followed by female AQV with 36.6%.

31.1% of overall CYP for the MSPAS came from three areas, Guatemala (17.4%), San Marcos (7.3%) and Quetzaltenango (6.4%).

IGSS

CYP rates increased 167.4% from 1999 to 2003. This number increased slightly in 2003 due to contraceptive supply problems at IGSS. AQV-F continued to be an important FP option for IGSS clients, producing 58,003 CYP. Additionally, IGSS began offering natural methods this past year which will most likely increase CYP rates in future years. It counts to a 1.07% from the total CYP amount.

Table 3 - Number of CYPs by method and year, MSPAS and IGSS combined

FP Method	MSPAS 1999	MSPAS 2000	MSPAS 2001	MSPAS 2002	MSPAS 2003	IGSS 1999	IGSS 2000	IGSS 2001	IGSS 2002	IGSS 2003
Depo Provera	19,602	46,036	78,684	122,018	138,388	16,121	24,888	21,411	21,757	21,398
Condom	9,171	11,861	11,143	13,977	18,564	3,242	4,422	3,471	4,386	4,907
IUD	6,461	15,610	12,506	12,768	17,196	12,138	8,697	6,878	8,775	7,676
Norplant	-	-	-	-	0	-	5,537	8,901	3,080	613
Oral pills	11,128	16,164	14,952	14,687	13,698	2,121	2,817	3,495	3,560	3,592
AQV male		3,606	1,452	726	781		4,032	3,432	3,212	3,476
AQV female	63,739	75,242	83,380	102,080	110,066	26,532	51,027	56,892	54,967	58,003
Naturals	-	-	-	-	1,848	-	-	-	388	1,045
Total CYPs	110,101	168,519	202,116	266,256	300,539	60,154	101,420	104,478	100,125	100,710

New acceptors

Nationwide

The target was failed by just 4.5 percentage points. Some 61.1% of new acceptors prefer Depo Provera nationwide and 66.9% in the eight priority areas. The MSPAS is at 5.2 percentage points below its target while IGSS is 1.4% above its target. An improved definition of new acceptors included at SIGSA could represent a decrease.

Table 4 - Numbers of new acceptors by targets and achieved, MSPAS & IGSS

Nationwide	Target 2003	Achieved	%
Total	262,416	250,714	95.5%
MSPAS*	232,416	220,282	94.8%
IGSS	30,000	30,432	101.4%

Priority Areas (8)

The annual target for the year for new acceptors was exceeded in the eight priority areas by 0.61%. During 2004, the number of new acceptors will continue to increase, as the community level component is consolidating, and IUD plus AQV support and hospital services are lengthened.

Table 5 - Number of new acceptors in 8 priority areas by target achieved, MSPAS

Priority Areas	Target 2003	Achieved*	%
MSPAS	72,175	72,582	100.6%

New acceptors by method and year, MSPAS & IGSS

Tables 6 and 7 show increasing amounts of new acceptors by institution and method. The MOH showed an increase of almost 3.5 times as many new acceptors from 1999 to 2003. Depo Provera for example, increased sixfold in the MSPAS between 1999 and 2003. Similarly, Depo Provera increased in IGSS by 365.3% between 1999 and 2003.

Table 6 – Number of new acceptors by method and year, MSPAS & IGSS

Method	MSPAS 1999	MSPAS 2000	MSPAS 2001	MSPAS 2002	MSPAS 2003	IGSS 1999	IGSS 2000	IGSS 2001	IGSS 2002	IGSS 2003
Depo Provera	21,806	50,240	91,340	132,216	139,453	3,761	8,430	12,942	12,899	13,738
Condon	11,501	16,624	18,957	29,795	22,408	625	1,850	5,427	5,197	5,638
IUD	1,270	2,095	2,232	2,602	3,606	1,647	2,485	1,965	2,507	2,193
Norplant	0	0	0	0	0	0	1,582	2,543	880	175
Oral pills	15,801	31,408	33,737	39,284	37,352	341	837	3,459	2,649	2,464
AQV male	0	328	132	66	69	0	366	312	292	316
AQV female	5,691	6,712	7,569	9,356	10,003	2,369	4,550	5,172	4,997	5,273
Natural Methods	0	0	0	0	7,391	0	0	0	0	635
New users	56,078	107,407	153,967	213,319	220,282	8,743	20,100	31,820	29,421	30,432

Both institutions show significant increases from 1999 to 2003 (91.5%) from 2000 to 2001 (43.4%) from 2001 to 2002 (38.6%) and from 2002 to 2003 (3.3%). Depo Provera had the most dramatic increases among 1999 to 2003 (599.0%). Additional efforts have to be integrated to increase vasectomy acceptance during next year with the cooperation of the Population Council.

Table 7 - Number of new acceptors by method and year, MSPAS and IGSS combined

FP Method	1999	2000	2001	2002	2003
Depo Provera	25,567	58,670	104,282	145,115	153,191
Condom	12,126	18,474	24,384	34,992	28,046
IUD	2,917	4,580	4,197	5,109	5,799
Norplant	0	1,582	2,543	880	175
Oral pills	16,142	32,245	37,196	41,933	39,816
AQV male	0	694	444	358	385
AQV female	8,060	11,262	12,741	14,353	15,276
Naturals Methods	0	0	0	0	8,026
Total new users	64,821	127,507	185,787	242,740	250,714

Calidad en Salud staff continued to provide ongoing organizational, normative, monitoring and training support to the PNSR and the *Unidad Ejecutora*, as well as the SIAS and the MSPAS Human Resources Department at both the central and local level.

Training

Calidad en Salud and the PNSR have developed two training sessions in "Management of Local Family Planning Programs" for the DAS and hospital level nurses; health districts and the rest of the service networks will receive training in 2004. Basic materials for training outreach personnel are in the process of being reviewed and they will be printed with counterpart funds.

A total of 3,846 service providers were trained in FP related topics (208 physicians, 1,590 auxiliary nurses, 482 nurses and 561 others). A trainer's (facilitator) guide for FP post partum and post abortion services and a mini-guide for FP provision were produced and are now in the process of being edited and formatted.

This year saw the in-service training in FP delivery of staff from 36 hospitals (97% of the total), 277 health centers (99% of the total) and 556 (58% of the total) health posts.

A total of 32 first year OB-GYN residents from the *Hospital General San Juan de Dios*, Roosevelt and Cuilapa were trained in FP service provision including IUD insertions. As a result, all new residents from Guatemala City are able to provide FP methods in outpatient facilities.

Auxiliary nurses: All nursing schools located in Mazatenango (2 schools), Quetzaltenango (2 schools), Chimaltenango, Cobán, INDAPS-Izabal, Zacapa, Jutiapa were trained in FP including IUD insertion. Therefore, all the new auxiliary nurses and TSR that graduate in 2003 will be fully trained and able to insert the Copper-T IUD.

Técnico en Salud Rural (TSR): 6 trainers received training of trainers (TOT) instruction at the TSR training center in Quirigua; they in turn, trained 74 TSR trainees.

IUD: Staff from 17 hospitals (50% of the total), 109 health centers (44% of the total) and 328 health posts (35% of the total) was trained in IUD delivery. However, IUD insertion rates have not increased in health areas as a result. It is expected that with the support of new equipment and the extension of IUD insertion to auxiliary nurses, an increase in insertion rates will be seen in the short to medium term.

Professional nurses: Some 29 professional nurses that are the directors of operating rooms were trained in infection prevention (*bioseguridad*) related to FP.

During the XXXI *Congreso Nacional de Ginecología y Obstetricia de Guatemala*, *Calidad en Salud* provided support to 30 physicians and 6 nurses to participate in the convention. *Calidad en Salud* also supported the *Congreso Nacional de Residentes de Ginecología y Obstetricia* in Quetzaltenango, in which some 35 Ob-Gyn residents from the southwest region participated. Two members of the *Calidad en Salud* team delivered formal presentations on family planning for teenager's and men's participation in reproductive health. The presentations were well received and generated many questions and comments.

1.1.2. AIEPI AINM-C Clinical Institutional Component

During 2003, the institutional clinical IMCI component focused on strengthening the adoption of innovative practices to improve the quality and coverage of maternal and child health services. In order to achieve this, the clinical IMCI component introduced the collaborative teams model in the priority health areas and strengthened health services by providing quality services with an integrated approach.

Collaborative Teams Model

The collaborative teams model was instituted in the 8 priority health areas of Agreement 520-0428 in a total of 17 districts, two teams per health area with the exception of Ixil which had three. Activities were initiated in May 2003 and will continue during 2004. The central level authorities have socialized and supported the model; also the central, area and district level teams heave been organized to plan, implement, follow-up on and consolidate the model.

In collaboration with the central level teams, *Calidad en Salud* supported the definition of the critical path to child survival, as a basis to define the processes and indicators that require improvement. In order to implement the model, learning sessions and action periods were proposed. The learning sessions are the foundation for revising quality themes and for the planning of operative actions to modify processes and indicators in each district. *Calidad en Salud* visited the health areas to make an implementation proposal and to select the districts that would participate in the collaborative model approach.

The organized teams in the health areas were invited for the first learning session to define the processes and indicators that need improvement, and the mechanisms to achieve them. Following socialization of the model and once the district collaborative teams came to an agreement on how to advance, a baseline survey of indicators was carried out and it was proposed that measurements of these indicators be taken on a weekly basis. The weekly measurements will help to determine the steps needed to guarantee qualilty in measuring and to make better decisions; in other words, the measurements are the PEVA or the plan, execution, verification and action steps to ensure that each indicator is improved and when anticipated results are not achieved, immediate actions are taken.

The central level has supported all collaborative teams following the learning sessions in the following aspects: measurement and documentation of indicators, analysis of the indicators by each team, registration of information in the Excel database designed for the teams, and analysis and decision-making based on the data.

The following are the results of measurements of indicators established by the collaborative teams:

Percentage of children whose general danger signs were verified. In both groups of children aged one-week to two months and two months to five years, a permanent trend towards improvement was observed in this indicator. In the group of children younger than two months the baseline was 50%; this value increased to 88% in the 22-week

measurement. For the group two months to five years old the baseline was 88% and reached 100% by the 22-week measurement.

Percentage of children with general danger signs that received adequate treatment prior to referral. In the group of children two months to five years old, the baseline showed that 80% of children with general danger signs received appropriate treatment prior to referral. This value improved and eventually reached 100% in the last measurement; however, in the 13th week of measurements the value was only 50% due to the inexperience of recently trained health providers in IMCI who did not know how to properly document indicators. In the group of children one week to two months old the completion of registration sheets for treatments administered prior to referral was observed to be inadequate.

Percentage of children whose nutritional status were verified. In the group one week to two months old the baseline for this indicator was 48% and reached a value of 85% in the 21st week of measurements. In the group of children two months to five years old the baseline was 52%, but reached 100% by the last measurement. A permanent improvement in the value of this indicator was observed following the baseline for both aged groups; however, some weeks fluctuated, either increasing or decreasing. The reason for this fluctuation, expressed by the teams, was that the nutrition component is the most difficult to achieve. There are many assignments and health providers often forget to check off all of the assignments they have accomplished, besides the fact that this is one of the most difficult components to evaluate that requires close and constant monitoring.

Percentage of children adequately classified. In both groups of children the tendency of this indicator has improved since the baseline was assessed, although the data was better for the group aged two months to five years old. In the group one week to two months old, the baseline value was 50%, but this number increased to 87% of adequate classification of all illnesses prevalent in childhood. In the group of children two months to five years old the baseline was 52%, but reached 100%.

Percentage of children registered as needing vaccination and that were administered vaccination. In the group of children aged two months to five years old, a permanent tendency to improve was identified in this indicator with the exception of week 15. Following this week, however, the value has been stabilized. In the group of children one week to two months old, following the 18th week of measuring, a decline in the registration of vaccinations administered was observed. The principal problem with this indicator is not that the vaccinations are not administered, but that they are not recorded on the registration sheets. When looking at the SIGSA for vaccinations, however, it shows that the vaccinations were indeed administered. Collaborative teams are working in order to assure adequate registration of vaccinations.

Percentage of children who are prescribed antibiotics but do NOT need them. The unnecessary prescribing of antibiotics continues to be a challenge to IMCI, to guarantee that they are not prescribed to children that do not need them. The trend in measurements of this indicator show that in both age groups, children are not being prescribed antibiotics when they do not need them, with the small exception of some children from the group aged two months to five years old. The reason for this exception is due to the inexperience of recently trained IMCI providers. Once this problem was corrected, measurement of this indicator once again improved.

Percentage of registration sheets completed and adequately filled-out. In the group of children two months to five years old the baseline for this indicator was 30%. Since then, 100% complete and adequate filling out of the forms has been achieved as recorded during the last measurement. In the group of children one week to two months old, the baseline was 20% but reached 72% by the time of the last measurement. A slight improvement in measurements 10 and 17 was observed as the value of the indicator reached 90%. This inconsistency explains the need for maintaining constant revision of the quality of registering and consensus decision making to work towards improvement.

Percentage of children that are prescribed antibiotics but do not receive them. The percentage of prescribed antibiotics that are not delivered has increased among children aged two months to five years old. This situation initially happened with the group of children one week to two months old but following the 10th measurement it was resolved. The exceptions were weeks 13 and 17 where a shortage affected both groups, but mainly the group of children two months to five years old.

Health establishments provide quality maternal and child health services

Monitoring tutorial in 2003: *monitoring tutorials* continued by accompanying facilitators to reinforce quality performance in the provision of health care services. The following is the data of tutorial coverage, as well as the personnel performance after receiving the tutorials.

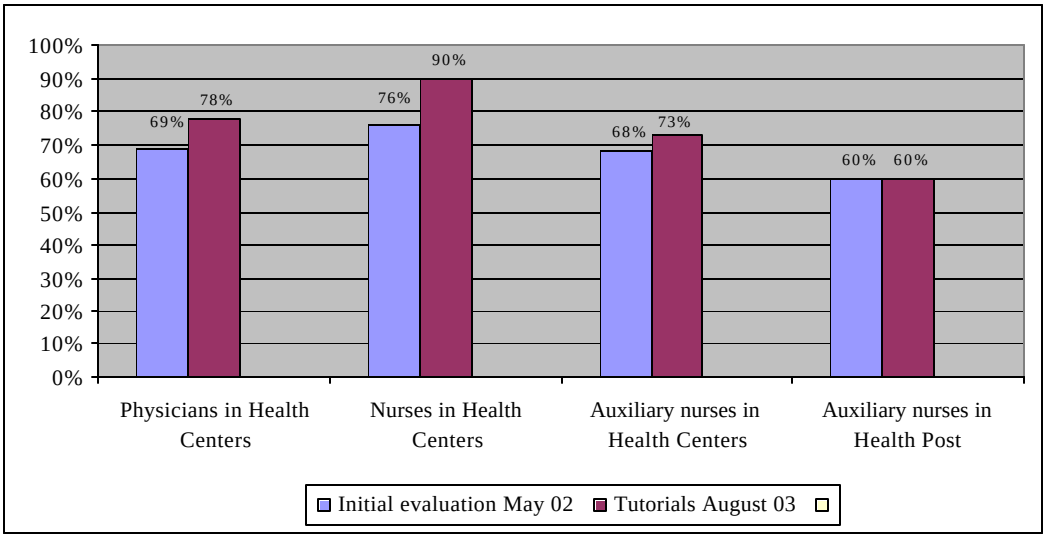
Tutorial coverage: the largest percentage of personnel (68%) that have received tutorials are professional nurses followed by health center doctors (59%) and auxiliary nurses in the centers and posts (46%) who received the least amount of coverage.

The area technical teams said that the reasons for these low percentages of coverage are due to the lack of people available to conducted the tutorials. In general, there is a lack of time, transportation and per diem to visit the health posts to provide monitoring tutorials.

Personnel Performance: In the following graph the data shows the performance of personnel that received tutorials compared to the results of the initial phase of evaluation. An improvement in the performance of physicians, professional nurses and auxiliaries from centers was observed with no change in the performance of auxiliaries from health posts.

Evaluating this data it can be concluded that the priority of the tutorials needs to change and be oriented to serve the needs of auxiliaries at health posts given that they often offer services on their own, are responsible for covering a large population, and are in close contact with the community. Also, there exists a greater possibility for them to have to attend to a larger amount of consultations and severe cases than other health personnel.

Graph 1: Percentage of providers who received tutorials that apply the IMCI strategy



Evidence of improving the quality of care as a result of the implementation of the IMCI strategy. It is important to show that the implementation of the IMCI strategy is generating results. Just three years after the MSPAS National Declaration to implement the IMCI strategy the following results were observed:

- Prior to its implementation, 60% of severely ill children identified in the health services were referred to a superior level of care, where specialized resources can be found and children have a better chance of surviving; measurements taken during implementation of the strategy show that this figure has increased to 74%

- In relation to children identified with pneumonia that receive appropriate antibiotics, the data increased from 76% to 93% which implies improved quality of care

- Similarly, the management of cases of children with diarrhea that have been treated in an adequate form with oral rehydration therapies, has improved from 52% to 69%

In 2004, *Calidad en Salud* will continue supporting the implementation of IMCI, putting emphasis on the plans for Quality Assurance, especially in the district collaborative teams and the pediatric hospital care. Expansion of the model will initiate in the health posts of the 17 districts where the collaborative teams already exist to the rest of the Area Health districts where the model has not been initiated. The project will also continue with monitoring tutorials as a complement to the collaborative teams, to retrain personnel who offer IMCI.

1.1.3. Micronutrients

Calidad en Salud provided support to update and initiate implementation of three new norms: *Suplementación Semanal de Hierro y Ácido Fólico, Iniciativa de Servicios de Salud Amigos de la Lactancia Materna* and *Monitoreo Mensual del Crecimiento*

Dr. Fernando Viteri's technical assistance was coordinated and literature on neural tube disorders was reviewed

Calidad en Salud participated in the review and production of various written and audiovisual materials that were eventually presented

Calidad en Salud coordinated and supported the training of 780 technical personnel from the 26 DAS on the norms

Technical assistance was given to PROSAN to develop an evaluation activity for Women's Health Month and to prepare for World Breastfeeding Week, where 26 IEC representatives from the DAS also received training in the new norms

Support was given to PROSAN and UPS-III (in charge of hospitals), for the implementation and follow up of the *Iniciativa de Servicios de Salud Amigos de la Lactancia Materna*

Calidad en Salud coordinated with World Vision in activities related to Vitamin A supplementation

Calidad en Salud coordinated with PROSAN, UPS-1 and UNICEF to determine the budgeted amount for micronutrient interventions (iron, folic acid and Vitamin A)

Calidad en Salud coordinated with PROSAN, World Vision, CONAPLAM and La Leche League of Guatemala, to involve 100 breastfeeding monitors from Guatemala and Chimaltenango to respond to requests for micronutrient supplementation in the health service centers for women and children

1.1.4. AIEPI AINM-C Integrated Case Management (AA-MC)

Participation in the process of standardizing training materials and job aids between the two components of the strategy (PP and MIC), and incorporation of the Minimum Expected Weight Gain Table within these materials.

Completion of training process for ambulatory nurses and doctors and institutional and community facilitators of the eight Directorates of the Health Areas and support for the training of trainers in Integrated Case Management of the operations research in San Marcos; new personnel also were trained.

Management training in NGOs integrated case management conducted for personnel from CARE, Mercy Corps, CRS, *Plan Internacional* and personnel from Alta Verapaz, to begin the expansion of MIC to other Health Areas; support was also given to prepare for training at the local level.

Training for personnel of the 8 DAS and 1st- level facilitators from *Calidad en Salud* and the *Unidad Ejecutora* in three processes: performance tutorials after training, community level supervision facilitation and monitoring of integrated case management providers.

Design of instrument and coordination with areas 1st-level facilitators and in conjunction with UPS-1, of the areas for the information gathering on the current status of Integrated Case Management. Application of the instrument in a sampling of approximately 10% of the community centers from the eight DAS.

Participation in AIEPI AINM-C integrated management meetings for monitoring and follow up in the eight DAS, in order to offer technical assistance and monitoring to the integrated case management implementation process, within the general context of the strategy.

Participation in the team effort for definition of the indicators of the AIEPI AINM-C strategy.

Support to PROSAN in conjunction with the monitoring component, in the process review and proposed changes to the SIGSAS, in order to gather information needed for the construction of AIEPI AINM-C strategy indicators.

Participation in the *Grupo Técnico Nacional* working on developing the proposal for *Seguridad Alimentaria y Nutricional*.

1.1.5. OR on AEC-PS

For the *Ampliación de Extensión de Cobertura en Puestos de Salud* variant, 19 community facilitators, 400 *Vigilantes de Salud*, and 58 traditional birth attendants were trained in AIEPI AINM-C.

A Baseline survey was conducted to determine the health care status prior to implementing the study with the PEC variants in three southwestern departments from San Marcos, Quetzaltenango and Totonicapán.

A data gathering instrument, Access database and user manual were developed for the cost study analysis; data were collected monthly for 40 service indicators for analysis and intervention.

A 12 indicator, six-month result study was conducted to evaluate the interventions of PEC and its two variants; main findings of the study are that PEC results are similar and in some cases less than the two variants results; the MSPAS information system does not consolidate all evaluated indicator information; important advances have been made in community organization; data from the cost study analysis will be available upon completion of OR study.

1.2. Result 2: Improve Household Health Practices

The GTI-IEC, formed in 2000, has been active for four years. Excellent coordination has been achieved in the pre-testing and printing of FP, AIEPI and AINM-C materials. Coordination was also achieved with The Population Council in the conduction of formative research for family planning balanced counseling, counseling on IUD and greater involvement of men in reproductive health. During the last quarter, members of the RH/FP sub-group participated in an adolescent fair and the adolescent sexual and reproductive health strategy workshop.

One-hundred percent of providers (approximately 6,000) involved in family planning counseling have been trained in balanced counseling, following training of trainers. The training of trainers' manual was published and a didactic guide for balanced counseling training was developed, reproduced and distributed.

Progress to overcome problems in the implementation of IMCI IEC/BCC was made: IEC Area Coordinators and *Calidad en Salud* 1st level facilitators in priority areas were trained in IMCI, additional quantities of materials were printed to improve availability in health facilities, refresher training for health providers in IMCI IPC/counseling and use of materials following a specific didactic guide was conducted. The IEC/BCC monitoring instrument that uses direct observation of IPC/counseling in health services was adapted and adopted by the collaborative teams working in health centers.

Institutionalization of growth monitoring and promotion at the community level supported by a national norm, a Guatemalan minimum expected weight gain table, and numerous job aids for community personnel and IEC materials for distribution to mothers was accomplished.

Final production of all AIEPI AINM-C job aids for providers and IEC materials for audiences was accomplished and over 13,000 sets were distributed to community health personnel along with training.

Monitoring in 30 selected health facilities showed that most of them had all FP and IMCI materials. Adequate counseling including systematic use of IMCI materials still needs to be strengthened.

The IEC monitoring and supervision system was developed in 2003 and was tried out in the field, especially in Quetzaltenango. In addition, an instrument to summarize IEC/BCC activities by IEC Health Area Coordinators was proposed to the Director of SIAS, the Communication Unit, and PROEDUSA. Once approved, it was sent to the General Health Information System (SIGSA) to be made official in December 2003. This is the first time that SIGSA has an instrument to monitor production of the IEC/BCC health services' support system.

Analysis of the ENSMI 2002 showed that significantly more reproductive-age women had listened to or seen messages about family planning than in the previous ENSMI (1998/99). Also, knowledge of specific family planning methods increased.

IEC/BCC team took part in international travel to: a) Colombia to participate in a workshop on Gender and Sexual and Reproductive Rights, b) Nicaragua to participate in an Expert Consultation on Community IMCI and c) Washington to attend a conference on men and reproductive health and to present a poster summarizing the results of MSPAS/*Calidad en Salud*'s Growth Monitoring and Promotion Operations Research conducted in the Ixil triangle at the 5th International Conference on the Scientific Basis of Health Services.

At IGSS, the IEC/BCC Section was established within the Communications Directorate of this institution. FP, IMCI and AIEPI AINM-C materials designed for the MSPAS have been adapted for IGSS and are now ready to be printed.

1.3. Result 3: MCH and NGOs are Better Managed

1.3.1. Logistics

During the year 2003, *Calidad en Salud*'s logistics team continued to work with organizations providing family planning services to Guatemalans, especially with the MSPAS, IGSS and NGOs that make up the outreach program, in the process of on-going improvement to logistics systems.

This has been a very productive year for the logistics component during which numerous activities and products were successfully finalized and delivered. During this year, the principal accomplishments were: a) training in logistics administration of 100% of the staff working in logistics of contraceptives among *Calidad en Salud* counterparts, b) development of four logistics manuals for the MSPAS and IGSS, c) development and

implementation of logistics management information systems, d) performing national inventories of contraceptives, e) implementing field visits to all service levels on a quarterly basis, f) information dissemination, g) implementing activities that form part of a contraceptive security initiative in Guatemala, and h) linking with other organizations and units within the MSPAS, such as the UNFPA, HIV/AIDS, UPS-1, SIGSA-SUI, GETSA, John Snow, the POLICY project, and APROFAM.

Because the achievements are numerous and they themselves subdivided into several components, in this report they have been organized into seven main areas (support to logistics staff at all levels, training, planning and coordination, manuals, logistics information systems, contraceptive security, and institutionalization)

1.3.2. Monitoring and Evaluation

SAMIG

- The transfer of SAM to the MSPAS (UPS1-SIGSA) was reactivated by creating a support and monitoring group between UPS1-SIGSA and *Calidad en Salud*, in order to verify, guarantee and monitor the tool's use at the national level
- Once SAM, produced by an external source, has successfully being finalized (taking into account the MSPAS's ability to manage the majority of information with its national level infrastructure), the decision was made to support the development and modification of the SIGSA applications, as well as the design and implementation of new modules adapted to the extension of coverage process; this new system was named SAMIG
- Modules for SAMIG's provision of services, logistics and financial administration were developed, the first two modules have been validated and the third is in the final stage of validation.
- The service provision and logistics modules were implemented in the eight priority health areas and the financial administration module is pending training.

UPS1–MSPAS

UPS-1 information systems were strengthened through the completion of *the Sistema de Información Georeferenciado (*SIGER) development and restructuring.

Calidad en Salud

- Review and update of *Calidad en Salud*'s monitoring plan: The monitoring plan includes 13 indicators that can be calculated and compared on a five-year basis, its calculation depend on ENSMI 1998-99 and 2002 results. 100% of the indicators showed positive change in 2002 with respect to the ENSMI 1998-99 results; of these 13 indicators, 9 or 69.2% reached and/or surpassed their proposed goal, 3 or 23.1% of indicators did not reach their proposed goal, and 1 indicator did not have a goal.
- Redesign of the AIEPI AINM-C monitoring system: The redesign of the monitoring system for the AIEPI AINM-C strategy was carried out, and a group of 34 indicators was developed and classified into three categories: quality (6), supervision (8) and monitoring (20). Indicators were discussed with *Calidad en Salud* personnel and MSPAS counterparts and all parties were in agreement with the number and structure of the indicators.

IO-AEC

Coordination of the component collaborated with Operation Research staff in the design, development and execution of the baseline survey as well as the presentation of the preliminary report of the survey, the condition also participated in discussions with the OR manager, counterparts from MSPAS and *ProRedes Salud*.

1.3.3. Planning and Programming

Calidad en Salud and the *Unidad Ejecutora*, in conjunction with the *Programa Nacional de Salud Reproductiva* (PNSR), and in coordination with the SIAS and Regulation Directorates and other MSPAS units, have implemented and executed the 2003 planned activities and interventions.

The Annual Operational Plans (POAs) for 2003 in the Health Areas have been implemented with different degrees of advancement, according to the technical and financial guidelines of the Reproductive Health Unit's components, such as Family Planning, AIEPI-AINM-C (at the clinical and community levels) and the different support systems (IEC/BCC, logistics, planning, supervision, monitoring and financial administration). The strategy of the Agreement's components also have been analyzed, in order to ensure that activities complement the Ministry's regular programs while the coordination of activities at the central level for the Health Areas is more effective with a focus on the seven departments of the western highlands.

The preparation, review and definition of guidelines for planning and programming focused on four main interventions of the project components and their ideas: (1) planning, organization and coordination; (2) training, (3) supervision, monitoring and logistics and, (4) goods, supplies and equipment. Modifications to the plans of the agreement were developed according to the technical and operational needs as well as the resources available at each level; the process advanced at quarterly, semester and annual periods.

Calidad en Salud and the UE carried out multiple quarterly meetings to review the progress of activities and to make program guideline modifications to each component for follow up and implementation of actions. The results of these meetings were then communicated and socialized within the Health Areas. The areas needing more support in technical areas were Ixil and Quetzaltenango, and in financial areas were Sololá, Quiche, Quetzaltenango, Totonicapán and Huehuetenango for financial execution reasons.

In non-priority areas of the Agreement, the incorporation of family planning, logistics and IEC into the POAs with regular funds and resources from counterpart funds at the central level was promoted.

Calidad en Salud and the *Unidad Ejecutora*, in support of the PNSR and other Agreement related programs, developed the annual 2004 planning and programming guidelines document. The document includes the plan's organization, justification, results from 2003, objectives, goals, monitoring indicators, strategies and general and specific activities to be implemented at the central and area levels. It also presents the program guide for each component's description (forms A, B, C) and instructions. This document was the basis for the Reproductive Health 2004 budget request to the Finance Ministry and to SEGEPLAN.

Calidad en Salud developed a plan to strengthen management with a focus on quality, for personnel from the eight priority Health Areas, with an emphasis on the Health Districts. Development of the document was made possible with the assistance of an international consultant, the Director of International Programs at URC, and Vice-President of the *Asociación de Programas Universitarios en la Administración de Salud* (AUPHA) in the USA.

Calidad en Salud, has conducted various presentations to promote this Plan, and has discussed with different departments and units of the MSPAS for its implementation, as well as presented terms of reference to the Rafael Landivar and San Carlos de Guatemala Universities, to determine the feasibility of them endorsing the Plan.

The objectives for the planning and programming component are:

- Improve the MSPAS Operational Planning and Programming process by conducting a unified implementation of the Agreement's programmed activities with FCP (counterpart funds) and of MSPAS POA, with regular funds
- Give annual and quarterly follow up to POA, analyzing activities and executions of each component
- Achieve institutionalization of the Agreement's components by systematizing and standardizing the technical and financial programming guidelines, based on the MSPAS's policy, objectives and priorities

- Establish goals and results accomplished by monitoring, evaluating and controlling the operational programming of the Agreement between the local and central level components and take corrective measures in a timely manner

1.3.4. Supervision – Facilitation

During 2003, supervision activities focused on carrying out support systems improvements and developing a supervision, monitoring and evaluation proposal for the community level. This system complements the *cascada de supervisión* and allows for the strengthening of quality care at all levels.

1.3.5. Finance and Administration

With support from *Calidad en Salud*, the MSPAS spent Q 8,274,611 in payments to the UNDP and UNFPA for the agreement 520-0428; another Q 841,736.63 and Q 661,276 were spent on the purchase of contraceptive methods from the UNFPA.

Budget execution of donated funds before the Public Finance Ministry was in the amount of Q 19.091 million corresponding to 2003.

Visits were made to the eight Health Areas to verify and review the support documentation and compliance with norms and financial management procedures that support the purchase of goods and services with counterpart funds.

Calidad en Salud supported the *Unidad Ejecutora* in the design and installation of an Intranet as well as in the contracting process, installation and training in the Accounting System software used to control counterpart funds.

1.4. Result 4: Community Participation and Empowerment

1.4.1. AIEPI AINM-C Promotion and Prevention (AA-PP)

Support for the development and launching of new growth monitoring and promotion norms based on the results of an operations research on the use of the minimum expected weight gain table coordinated by *Calidad en Salud*

Establishment of training teams within the national health system

Design, evaluation and testing of a trainer's manual for community personnel

Redesign of trainer's manual for community personnel (VS and FC)

Distribution of training IEC materials

Training in the use of the methodology's guide for training community personnel and in the tools of the minimum expected weight gain table, for training teams

Promotion and Prevention component training for 168 institutional facilitators

Review and definition of AIEPI AINM-C strategy indicators and goals

Review and preliminary field testing of supervision and monitoring instruments

Coordination with AID partner and non-partner NGOs and cooperating agencies for the implementation of the strategy in other areas at the national level

Training of 9 rural health technicians from the IO/AEC/PS in the methodology in guide for module III

Training of 10,735 *Vigilantes de salud* in module I, 10,448 in module II and 8,644 in module III

Training of 808 community facilitators in module I, 801 in module II and 777 in module III

Tutorials for trainers' performance improvement

Tutorials for *Vigilantes de salud's* performance improvement

1.4.2. Community Participation

Documentation of training and implementation of the community participation methodology in four "success cases" in Chimaltenango.

Based on the findings and recommendations of the documentation the development and implementation of a follow-up plan in community participation as part of the AIEPI AINM-C strategy was coordination with UPS-1, PROEDUSA, JHPIEGO and the UNFPA. The level of completion of such plan was estimated in 53 percent.

Specific training in the community participation methodology was carried out in Ixil, Huehuetenango and San Marcos. In addition, training of 10,735 VS, 808 FC, 168 FI, 173 MA, and 65 community *gestores* in the community participation methodology, included in the first module of the AIEPI AINM-C Promotion and Prevention component, was conducted.

Coordination with a rural health technicians training institute - *Instituto de Adiestramiento de Personal de Salud* (INDAPS)- was obtained for TSR practitioners to follow up on community participation in 25 communities in Chimaltenango.

Training of institutional health personnel from Alta Verapaz and NGOs (MERCY CORPS, PCI, Share, CARE, Plan International and CRS) in the four steps of the community participation methodology, as part of the expansion of the AIEPI AINM-C strategy, was carried out.

Official adoption of the CP methodology, including printing and distribution of 1,000 manuals on the methodology - "*Metodología para la Participación Comunitaria en el Primer Nivel de Atención de los Servicios de Salud*"- and its annex - "*Guía para Elaborar la Sala situacional Comunitaria*"- which provides specific guidelines and charts for the development of a community situational room were achieved.

Trace indicators for the community participation component within AIEPI AINM-C were defined and included in the monitoring and supervision system and in the official health information system (SIGSA).

Two monitoring and supervision instruments, which allow for the calculation of trace indicators of the community participation component within AIEPI AINM-C were designed, pre-tested and finalized. Monitoring of the implementation of the growth monitoring and promotion and summary information to identify communities at risk that should complete the cycle of community participation (analysis and action plan) to improve growth of children was begun.

Monitoring of the community *sala situacional* in five health areas: Sololá, Quiché, Totonicapán, San Marcos and Chimaltenango was carried out.

1.5. Result 5: Increased Use of MCH Services by IGSS

Due to the political and financial crisis in IGSS during the current year, there were constant changes at the higher authority level (management and lower management) which proved to be a barrier for collaborative work plan continuity. There were, however, important results related to the institutionalization of maternal and child health care and the better administration of the logistics, information and supervision systems resources.

Cooperation between *Calidad en Salud* and IGSS will continue until the 30th of September 2004, evidenced by Article 20 of the "*Carta de Entendimiento para la Cooperación Técnica entre el Instituto Guatemalteco de Seguridad Social y el Programa Calidad en Salud, Mejor Salud para Mujeres, Niñas y Niños del Altiplano de Guatemala*" which was endorsed by both parties on May 12, 2002.

One of the most important achievements has been the approval by the IGSS Board of Directors to create a Department of Social Communication and Public Relations in which IEC (Information, Education and Communication) was included, having its own designated human and financial resources. This will allow for greater promotion and dissemination of the Institute's preventive programs.

In the area of contraceptive security, there were also excellent results. Management provided instruction for the administration in the establishment of norms for procurement, distribution, and use and payment of contraceptive methods to the UNFPA. The financial resources for timely payment were allotted, and officialization of logistics administration of contraceptives through a Management Agreement were also established.

The 2004 Plans are directed towards the institutionalization of joint processes that will allow IGSS to produce their own IEC materials, and the improvement of logistics, supervision and information systems which will result in improved maternal child health programs management, and better use of quality services for women and children.

Key IGSS results

- Extension of the Letter of Understanding between IGSS and *Calidad en Salud* for the continuation of work for one more year was made official
- Creation of the Department of Social Communication and Public Relations, which includes IEC
- Approval of manuals for logistics administration for the Institute's contraceptives, a management agreement
- Establishment of norms for the procurement, supply, distribution and payment of contraceptive methods to the UNFPA; the Internal Audit Department of IGSS also conducted the first physical inventory of the available supply of contraceptive methods at the Institute's service units
- The Medical Audit Department carried out supervision with a facilitation approach.
- A Quality Assurance Commission was established by management, to improve the quality of institutional services
- Printing and distribution of the IMCI and Family Planning Manuals were carried out in 100% of the assistance units, as norms for care for women and children, with 90% of the services supplied with IEC materials
- Training of institute personnel in the balanced counseling model in 100% of the assistance units; currently 25 assistance centers have trained personnel to offer natural methods
- Strengthening of the program for contraception use after an obstetric intervention in four of the Institute's Hospitals

- 95% of the personnel that cares for children through the IMCI strategy were trained, as were 24 Institute facilitators for personnel training in the AIEPI AINM-C strategy implementation, at the community levels of Escuintla and Suchitepéquez departments

- 127 members of the personnel from 100% of the assistance units were trained in the use, knowledge and application of the logistics management manuals, and 109 individuals in the supervision- facilitation process.

2. MSPAS RESULTS

2.1. Result 1: Increase in the Use of Maternal and Child Health Services provided by the MSPAS and its Partner NGOs

2.1.1. Family Planning Results

- Community Health Agents Provide Quality Care
- Health Facilities Provide Quality Maternal Child Health Services
- Innovative Approaches for Improving the Quality and Coverage of Maternal Child Health Services are Adopted

Family Planning Strategy and Objectives

The objectives of FP are to increase access, quality, demand, and use of services at all service points (hospitals, clinics, communities) and NGOs. This strategy includes: the officialization of the reproductive health program, revision of norms, organization of the PNSR and delivery of services, development of training methods and materials, training of providers and community workers, and providing critical support services such as logistics, monitoring and supervision-facilitation.

During the course of 2003, some 3,846 persons were trained in FP related topics (527 physicians, 1,590 auxiliary nurses, 482 nurses and 561 others). Highlights from 2003 included an in-service training for staff from 36 hospitals, 277 health centers and 556 health posts in delivery of FP.

This year also saw an important revision to the national FP norms which focused on eliminating unnecessary medical barriers so as to improve access to services. Most of the medical barriers that were eliminated were obsolete or illogical requirements, which discouraged access to and wish to accept FP methods.

The quality of service delivery was also improved by the provision of IUD insertion kits to all health centers in addition to minilap and vasectomy kits to hospitals. In hospitals, the provision of this surgical equipment coincided with training in service delivery, thereby contributing to improved service provision as well.

The methods offered at the community level were expanded by developing training materials for outreach staff and by proposing basic methodologies for family planning options offered by voluntary health personnel. At the same time well-built IEC campaigns linked to family planning have generated demand on the part of well-informed customers.

Lastly, the logistics component achieved improvements in the supply levels of contraceptives, thereby contributing to an improved ability to meet the demand for methods throughout the network services points.

Family Planning

Nationwide: 103% of the annual target for CYP had been achieved, 103.6% for the MSPAS and 100.7% for IGSS. 95.5% of the annual target for new acceptors has been achieved

8 priority areas: The level of CYP achieved in the eight priority areas is the same as the remainder of the country (103.6%). The annual target was surpassed by 3.6%. New acceptors annual target for the year was exceeded in the eight priority areas by 0.61%.

National FP Norms: June 18 saw the launching of new FP Guidelines that contain a new set of state-of-the-art regulations, less medical barriers, an increased access to FP methods plus valuable information on logistics and information systems.

Reviewed and updated approved National AQV system document

Trained 1,590 auxiliary nurses, 482 nurses, 527 physicians and 561 others in FP provision and counseling. Total of 3,846 trainees were trained in FP related topics. In-service training in FP delivery of staff from 36 hospitals (97% of the total), 277 health centers (99% of the total) and 556 (58% of the total) health posts

Trained 49 auxiliary nursing school teachers in FP, including IUD insertion methods

Equipment provided: 13 AQV female surgical kits, 80 IUD insertion kits, 10 "*aspiradores de flemas*", 6 auxiliary operating tables, 6 portable operating lamps, 7 AQV male vasectomy surgical kits, 24 sterilization pots with small propane stoves, 17 "Goose Neck Lamps", 8 IV infusion stands (*atriles*), 3 shelves stands (*estanterías*), 6 transport stretchers, 6 oscillating fans, plus 80 vaginal speculums.

Monitoring results

CYPs

Nationwide

Nationwide: As of December 30th, 2003, 103% of the annual target for CYP had been achieved, 103.6% for the MSPAS and 100.7% for IGSS. The MSPAS's cumulative percentage for CYP is 3.6 percentage points above the goal while IGSS is 0.7 percentage points below its target for CYP. These data include al December's available data. In some areas as much as 61% of new acceptors are selecting injectables.

In order to provide the best combination of FP methods, a promotional campaign of the Copper-T IUD was designed and implemented. DepoProvera will continue to be the preferred FP method by new acceptors, but the re-introduction of IUDs and increasing access to Copper-T IUD will allow auxiliary nurses to insert this plus the increased access to AQV will continue to improve the number of CYP per new acceptor. Stock-outs of methods in community centers constitute less of a barrier to recruiting and serving new acceptors as the levels of stock-outs were reduced to 18% at the time of the inventory visit to health facilities.

During 2004, the PNSR and *Calidad en Salud* will continue introducing an improved comprehensive package of AQV services, in the communities, health posts, hospitals to ensure proper follow up. Hence users of clinical methods will be acknowledged and informed in community and health posts/centers, referred, served and followed up to avoid complications. This approach is designed for the whole country.

Table 8 -Number of CYPs nationwide by target achieved, MSPAS & IGSS, 2003

Nationwide	Target 2003	Achieved	%
Total	390,076	401,249.5	102.9%
MSPAS	290,076	300,539.5	103.6%
IGSS	100,000	100,710.0	100.7%

Priority areas (8)

The level of CYP achieved in the eight priority areas is the same as the remainder of the country. The annual target was surpassed by 3.6%. The increase in CYP in the 8 priority areas is related to improved advertising and the offer of FP methods in health centers and posts, compared to other areas where FP efforts are just getting underway and *Calidad en Salud* project resources are less.

Table 9 - Number of CYPs in 8 priority areas by target achieved, MSPAS, 2003

Priority Areas (8)	Target 2003	Achieved	%
MSPAS	93,357.00	96,690.9	103.6%

MSPAS

The increase in CYP for the MSPAS is accounted for by a more than seven-fold increase in injectable acceptance (from 19,602 in 1999 to 138,387.8 in 2003). It represents 46.0% of the total CYP, followed by female AQV with 36.6%.

31.1% of overall CYP for the MSPAS came from three areas, Guatemala (17.4%), San Marcos (7.3%) and Quetzaltenango (6.4%).

IGSS

CYP increased 167.4% from 1999 to 2003. This number increased slightly in 2003 due to contraceptive supply problems at IGSS. AQV-F continued to be an important FP option for IGSS clients, producing 58,003 CYP. Additionally, IGSS began offering natural methods this past year which will most likely increase CYP rates in future years. It counts to a 1.07% from the total CYP amount.

Table 10 - Number of CYPs by method and year, 1999, 2000, 2001, 2002 and 2003, MSPAS and IGSS

FP Method	MSPAS 1999	MSPAS 2000	MSPAS 2001	MSPAS 2002	MSPAS 2003	IGSS 1999	IGSS 2000	IGSS 2001	IGSS 2002	IGSS 2003
Depo Provera	19,602	46,036	78,684	122,018	138,388	16,121	24,888	21,411	21,757	21,398
Condom	9,171	11,861	11,143	13,977	18,564	3,242	4,422	3,471	4,386	4,907
IUD	6,461	15,610	12,506	12,768	17,196	12,138	8,697	6,878	8,775	7,676
Norplant	-	-	-	-	0	-	5,537	8,901	3,080	613
Oral pills	11,128	16,164	14,952	14,687	13,698	2,121	2,817	3,495	3,560	3,592
AQV male		3,606	1,452	726	781		4,032	3,432	3,212	3,476
AQV female	63,739	75,242	83,380	102,080	110,066	26,532	51,027	56,892	54,967	58,003
Naturals	-	-	-	-	1,848	-	-	-	388	1,045
Total CYPs	110,101	168,519	202,116	266,256	300,539	60,154	101,420	104,478	100,125	100,710

Nationwide

The increase in CYP for both institutions from 1999 to 2003 is 232.9%, accounted for by a more than four-fold increase in injectable acceptance (from 35,723 in 1999 to 159,786 in 2003) plus the increase in AQV-female acceptance (from 90,271 in 1999 to 168,069 in 2003), which was more than 186.2% increase. Also IUD insertions increased from 21,543 in 2002 to 24,872 in 2003 a 15% increase.

Table 11 - Number of CYPs by method and year, MSPAS and IGSS combined

FP Method	1999	2000	2001	2002	2003
Depo Provera	35723	70,924	100,095	143,775	159,786
Condom	12,413	16,283	14,613	18,363	23,471
IUD	18,599	24,307	19,383	21,543	24,872
Norplant	0	5,537	8,901	3.080	613
Oral pills	13,249	18,981	18,447	18,247	17,290
AQV male	0	7,638	4,884	3,938	4,257
AQV female	90,271	126,269	140,272	157,047	168,069
Naturals Methods	-	-	-	388	2,893
Total CYPs	172,2545	269,939	306,594	366,381	401,249

New acceptors

Nationwide

95.5% of the annual target for new acceptors has been achieved. Some 61.1% of new acceptors prefer Depo Provera nationwide and 66.9% in the eight priority areas. The MSPAS is at 5.2 percentage points below its target while IGSS is 1.4% above its target. In MSPAS new acceptors better definition recently included at SIGSA could represent a decrease in new acceptors.

Table 12 - Numbers of new acceptors by targets and achieved, MSPAS & IGSS

Nationwide	Target 2003	Achieved	%
Total	262,416	250,714	95.5%
MSPAS*	232,416	220,282	94.8%
IGSS	30,000	30,432	101.4%

Priority Areas (8)

The annual target for the year was exceeded in the eight priority areas by 0.61%. During 2004, the number of new acceptors will continue to increase, as the community level component is consolidating, and AQV support and hospital services are lengthened.

Table 13 - Number of new acceptors in 8 priority areas by target achieved, MSPAS

Priority Areas	Target 2003	Achieved*	%
MSPAS	72,175	72,582	100.6%

New Acceptors by Method and Year, MSPAS & IGSS

Tables 14 and 15 show increasing amounts of new acceptors by institution and method. The MOH showed an increase of almost 3.5 times as many new acceptors from 1999 to 2003. Depo Provera for example, increased sixfold in the MSPAS between 1999 and 2003. Similarly, Depo Provera increased in IGSS by 365.3% between 1999 and 2003.

Table 14 - Number of new acceptors by method and year, MSPAS & IGSS

Method	MSPAS 1999	MSPAS 2000	MSPAS 2001	MSPAS 2002	MSPAS 2003	IGSS 1999	IGSS 2000	IGSS 2001	IGSS 2002	IGSS 2003
Depo Provera	21,806	50,240	91,340	132,216	139,453	3,761	8,430	12,942	12,899	13,738
Condon	11,501	16,624	18,957	29,795	22,408	625	1,850	5,427	5,197	5,638
IUD	1,270	2,095	2,232	2,602	3,606	1,647	2,485	1,965	2,507	2,193
Norplant	0	0	0	0	0	0	1,582	2,543	880	175
Oral pills	15,801	31,408	33,737	39,284	37,352	341	837	3,459	2,649	2,464
AQV male	0	328	132	66	69	0	366	312	292	316
AQV female	5,691	6,712	7,569	9,356	10,003	2,369	4,550	5,172	4,997	5,273
Natural Methods	0	0	0	0	7,391	0	0	0	0	635
New users	56,078	107,407	153,967	213,319	220,282	8,743	20,100	31,820	29,421	30,432

Both institutions show significant increases from 1999 to 2003 (91.5%) from 2000 to 2001 (43.4%) from 2001 to 2002 (38.6%) and from 2002 to 2003 (3.3%). Depo Provera had the most dramatic increases among 1999 to 2003 (599.0%). Additional efforts have to be integrated to increase vasectomy acceptance during next year with the cooperation of the Population Council.

Table 15 - Number of new acceptors by method and year, MSPAS and IGSS combined

FP Method	1999	2000	2001	2002	2003
Depo Provera	25,567	58,670	104,282	145,115	153,191
Condom	12,126	18,474	24,384	34,992	28,046
IUD	2,917	4,580	4,197	5,109	5,799
Norplant	0	1,582	2,543	880	175
Oral pills	16,142	32,245	37,196	41,933	39,816
AQV male	0	694	444	358	385
AQV female	8,060	11,262	12,741	14,353	15,276
Naturals Methods	0	0	0	0	8,026
Total new users	64,821	127,507	185,787	242,740	250,714

Organization of Reproductive Health and Family Planning

Calidad en Salud staff continued to provide on-going managerial, normative, monitoring and training support to the PNSR and the *Unidad Ejecutora*, as well as the SIAS and the MSPAS Human Resources Department at both the central and local level.

During November, the family planning goals for the PNSR for 2004 were presented by the Minister of Health to MSPAS staff, and made official under the direction of Dr. Roberto Santiso, the NRHP Coordinator. These goals were established based on the results of 2003, the reproductive age population, and data on access to FP providers. Now each health area set its own goals using these criteria.

A national AQV program was continued during this year. The UPS-3 director supported the implementation of AQV in all hospitals. *Calidad en Salud* in conjunction with PNSR developed a national AQV family planning program document with the intention of standardizing the performance of the MSPAS personnel involved with AQV interventions. The strategies are designed to improve personnel routine, norm updates, and increase access to services through a better system of referrals from community-level amenities to hospitals.

A monitoring tool has been implemented for use in health posts, centers and hospital FP services. This instrument allows for the tracking of the FP program at the local level and provides managers with data about compliance with programmatic goals.

Performance monitoring of Trained FP providers

During the second quarter of 2003, in an effort to find out the acquiescence of family planning provider's facilities, an assessment was carried out. Using a convenience sample, data gathering shows: 75 health facilities from 19 health areas were visited; it includes 42 health centers, 22 hospitals and 11 health posts. Data from IEC supplies accessibility were collected, 61 services hold IEC materials at the visit time, just 52 of them use the material and almost all of those were FP brochures. Only 47 services bring the pamphlets to FP customers.

From the total services, 62.2% reported were covered with AQV Informed Consent forms. Only 26.8% of services visited also have Male Surgical Reference Forms plus 40.6% Female Surgical Reference Forms. According to data, the new FP program needs to improve the IEC materials distribution and handling, assuring the delivery of brochures to FP clients. With the comprehensive counseling methodology called "*Consejería Balanceada*" or balanced counseling improvements in this area are anticipated.

77.3% of facilities on average have condoms, oral pills, Depo Provera and Copper T. 77.8% of all facilities visited have IUD insertion kits. These data show an improvement in contraceptive stock outs plus increased access to equipment that has improved IUD services.

Also in an attempt to establish the performance of family planning providers, an evaluation was conducted. Three types of FP service interactions were observed: child health, prenatal and post-natal. (See table 16).

Table 16 - Results of the Performance Evaluation of FP Counselling Services Given by Type of Visit, years 2002 vs. 2003.

Performance	Child		Prenatal		Post Natal %	
	2002%	2003%	2002%	2003%	2002%	2003%
Asked if the woman uses any methods	25	55	NA	NA	NA	NA
Offered contraceptive methods	21.6	60	NA	NA	NA	NA
Debriefed on breastfeeding	NA	NA	47.8	47	81	70
Asked about the patient's reproductive desires	NA	NA	43.5	47	76.2	74
Asked patient about their knowledge of contraceptive methods	12.9	35	32	44	66.7	44
Debriefed on MELA	NA	NA	34.8	34	52.4	35
Debriefed on DIU post-partum	NA	NA	2.2	10	NA	NA
Debriefed on AQV post-partum	NA	NA	23.9	26	NA	NA
Debriefed on informed consent	NA	NA	10.9	21	NA	NA
Filled out the informed consent	NA	NA	10.9	8	NA	NA
Informed patient of all the available methods	18.1	65	37	55	76.2	83
Gave clear, concise and complete information regarding use of contraceptive methods	10.3	50	26.1	40	61.9	52
Helped determine a contraceptive method	14.7	28	15.2	24	42.9	48
Gave a selected method	12.1	21	NA	NA	42.9	39
Registered information for the care that was given	97.4	88	93.5	95	90.5	74
Total	122	74	50	50	22	25

The data collected from the visits shows a significant improvement in the childcare offered by mothers and caretakers in all three types of health services investigated. For example, mothers and caretakers were questioned about the use of contraceptive methods. They were then offered the methods, providing them with information on all available methods in the service center. The data collected for the pre-natal consultation demonstrates an improvement in the methods used to question mothers and caretakers about their knowledge of contraceptive methods and to inform them about post-partum IUD and AQV. During the post-partum consultation, however, only information on available methods showed an improvement. As a result, opportunities to integrate family planning services within the rest of the health services being offered have been lost. The MSPAS needs to strengthen the process of integrating family planning services. This can be accomplished by training staff in a more comprehensive model of provision of health services that includes family planning education.

Norms and guidelines

June 18 saw the launching of new FP Guidelines that contain a new set of state-of-the-art regulations, less medical barriers, an increased access to FP methods plus valuable information on logistics and information systems.

During 2003, *Calidad en Salud* provided technical assistance to develop a set of guidelines to regulate Family Planning Service provisions related to delivery and post abortion care. Guidelines were also developed for the monitoring and recognition of side effects from contraceptive methods use (*Sistema Nacional de Vigilancia de PF*). A document about AQV National System was finished and it is in the process of being edited and formatted either a FP Provision Handbook (*Mini Guía*) it's processed too.

Calidad en Salud provided scientific and methodological support to develop a set of documents to regulate FP service provisions to teenagers and women over 35 years old. They were revised by a technical committee and are in the final process of being modified and approved by the decision-making personnel from the MOH and PNSR.

Furthermore *Calidad en Salud* provided technical support to build up a report on the 2002 Demographic Health Survey (ENSMI 2002) these were revised by a technical committee and were presented in November with a remarkable participation from *Calidad en Salud* central technical team members. Men Survey in reproductive health collected for the first time in Guatemala was presented by *Calidad en Salud's* COP.

A new analysis tool named Family Planning Situational Room, was developed and validated with health personnel. This tool was created to facilitate analysis of FP services provided (new acceptant and distributed methods) and will serve as the basis for determining the efforts needed to accomplish programmatic goals and improve services. Key MSPAS personnel were trained in its use and will put it into practice starting January 2004.

Training

Personnel were trained in service delivery improvement, focusing on early detection and management of side effects, tools and technical support for immediate delivery of the method of choice. During this year efforts had been seated to teach the providers in a new counseling methodology based on an Operation Research developed by the Population Council. Also MOH PNSR looks to provide a user friendly guide to manage FP programs at the district level, encouraging the use of local statistics and in service immediate knowledge application at the grass root level.

At this time, *Calidad en Salud* together with the PNSR has developed two training sessions in "Management of Local Family Planning Programs" for the DAS and hospital level nurses; health districts will be covered next year. Basic materials for training outreach personnel have been reviewed and printed with counterpart funds. Management of local FP programs included the administration of the four most important parts as follows: planning, organizing and human resources, directing and finally, control

A total of 3,846 people were trained in FP related topics (527 physicians, 1,590 auxiliary nurses, 482 nurses and 561 others).

This year saw the in-service training in FP delivery of staff from 36 hospitals, 277 health centers and 556 health posts.

Other specific training results include:

AQV: 13 physicians and 19 nurses were trained to provide a comprehensive FP and female sterilization program at the local level. The training methodology consisted of tutorials utilized in three hospitals (Cuilapa, Coatepeque, and Quetzaltenango). Staffs at thirty-six hospitals received follow up tutorial training on AQV.

IUD: 345 auxiliary nurses from 10 health areas (Suchitepéquez, Retalhuleu, Peten, Zacapa, Izabal, Alta Verapaz, Baja Verapaz, Ixcán, Santa Rosa and Guatemala), have been trained in IUD insertion. It is expected that with the support of new equipment and IUD insertion by auxiliary nurses, a larger increase in insertion rates will be seen.

During next year *Calidad en Salud* will review the training methodology plus an operations research implemented by The Population Council, in order to improve results and create a user-friendly, in service training course.

Medical Schools: 67 final year medical students from the University of San Carlos located in Guatemala City were trained in FP including IUD insertion. 31 first-year Ob-Gyn residents from the *San Juan de Dios* Hospital and Cuilapa were trained in 2003.

National OB-GYN Congress: During the XXXI *Congreso Nacional de Ginecología y Obstetricia* of Guatemala, *Calidad en Salud* provided support to 30 physicians and 6 nurses to participate in the conference. *Calidad en Salud* also supported the *Congreso Nacional de Residentes de Ginecología y Obstetricia* in Quetzaltenango, in which some 35 OB-Gyn residents from the southwest region participated. Either *Calidad en Salud* provided two lecturers to present conferences on family planning for teenager's and men's participation in reproductive health. These were well received and generated many questions and comments.

Improved Counseling Strategy (*Consejería Balanceada*): 140 last year medical students from the University of San Carlos located in Guatemala City were trained in this new approach to FP Counseling.

With support from the Population Council, who gave job aids to provide balanced counseling-comprehensive FP information a total of 308 professionals nurse, TSR and auxiliary nurses were trained as trainers and they replicated the course nationwide, during last July. Moreover, the Population Council provided job aids: algorithms and cards to provide Client Oriented (Consejería Balanceada) comprehensive FP infomation; a total of 2,242 health providers were trained by health district nurses at national level, during second quarter of 2003. This intervention was conducted in close collaboration with the *Population Council*. This action successfully introduced the use of the balanced counseling strategy in Guatemala and, to that extent, has contributed to improve informed choice of contraceptives in the country.

IUD Increasing Access Strategy

During 2003, 126 auxiliary nurses have been trained to perform IUD insertion in 12 areas; it means training, facilities and IUD insertion equipment are now more readily available. These criteria were developed together with UPS -1 and the PNSR. With new added equipment and IUD insertions performed by auxiliary nurses, access to IUD has improved. Additionally, it is being supported by person-to-person promotion along with radio campaigns and reference advertising material designed to represent the Mayan and non-Mayan population.

Equipment for FP

During 2003, *Calidad en Salud* provided 13 AQV female surgical kits, 80 IUD insertion kits, 10 "*aspiradores de flemas*", 6 auxiliary operating tables, 6 portable operating lamps, 7 AQV male vasectomy surgical kits, 24 sterilization pots with small propane stoves, 17 "Goose Neck Lamps", 8 IV infusion stands (*atriles*), 3 shelves stands (*estanterías*), 6 transport stretchers, 6 oscillating fans, plus 80 vaginal speculums. These were donated to 35 hospitals, sixty health centers, forty health posts and two maternity centers (See annex G, Equipment Delivery). Also *Calidad en Salud* furbished entire clinics to allow 16 hospitals to offer family planning services. These donations were made to increase the capability of FP services provision units to respond to the increase in demand created by training health personnel in FP promotion.

End User Monitoring: *Calidad en Salud* developed a survey for 19 health areas, 22 Hospitals and 58 Health centers, finding almost all the equipment donated in place. In only one case where it is not in place, *Calidad en Salud* personnel reported immediately to the Health Area Director in order to take the necessary actions to resolve the problem. Following equipment delivery has been better documented including arriving shipments and individual responsibility cards, as well the official certificate of received equipment and acknowledgment document. During last June, the SIAS Director sent a memo ordering all Health Areas to provide a complete set of documents that acknowledges the donation of equipment. *Calidad en Salud* will send a complete documentation set to certify that equipment delivery is well monitored.

Limitations in Family Planning

The PNSR is a relatively new program and will require more time to build its human resource capacity and to maintain technical support to all activities to institutionalize FP in the MSPAS at the local and central level. Additionally, full management support is needed to assure the allocation of funds and maintain constant supply of family planning services to meet an increasing demand.

FP activities need an innovative strategy to advertise and capture the attention of new clients. It is difficult to work without an IEC department within the MOH.

The changing of authorities in the MOH due to a new government may mean a delay in strengthening and institutionalizing of the family planning services planned for 2004.

The MOH-SIGSA information system needs improvement in the gathering and data processing of FP information, in order to provide accurate and opportune information for decision-making.

Although substantial improvements are being made in the logistics system, low stocks of contraceptives at lower level facilities continue to be a barrier to new users (Depo-Provera & Copper T).

2.1.2. Child Health (Clinical IMCI) Results

The work of this component during 2003 was oriented towards these lines of actions: 1) Adoption of innovative approaches to improve the quality and coverage of maternal child health services; 2) collaborative teams model and Health establishments provide quality maternal child health services.

The following is a presentation of results obtained in each of the lines of action mentioned above:

Adoption of innovative approaches to improve the quality and coverage of maternal child health services Collaborative Teams Model.

History and justification gaps

Given the high infant mortality rate and the need to improve the quality of child chare and to promote the monitoring of growth, the MSPAS initiated implementation of the AIEPI AINM-C strategy in the 8 health areas of the Guatemalan highlands, with support of USAID/*Calidad en Salud*.

The MSPAS organized the National Technical Advisor Team for IMCI to facilitate implementation of the strategy, starting with the revision and adaptation of norms of the health care programs involved in IMCI. Equally, the training materials were adapted, area and district teams to implement the strategy were formed, and health area, center and post personnel were trained in 98 districts, accounting for 1,071 trained providers including doctors, professional nurses and auxiliary nurses. The area and district facilitator teams were trained in the follow-up training process received to improve performance of personnel and of services and to achieve an effective application of the IMCI strategy.

The evaluation of the initial phase conducted in May 2002 was the foundation for initiating improvement activities, permitting the district and area teams to improve the quality of services offered and to arrive at better results. Despite the interest and energy to improve the quality of care, gaps were continuously observed which has motivated staff to continue to analyze the causes of these gaps.

Among the identified gaps, several are worth noting: 36% of trained personnel received tutorials, 25% of the trained personnel do not complete the four processes of care or PEVA, 20% of personnel do not evaluate the four general danger signs, 50% do not complete all of the tasks to evaluate prevalent illnesses, 30% do not classify nor treat children adequately according to IMCI standards and 45% do not give integrated counseling. Equally, 28% of services had shortage of essential medicines for IMCI and 50% of mothers did not remember the recommendations for medicines, foods, liquids and when to return to service centers for check-up visits.

Bried conceptual description

Given the previously presented gaps, the implementation of the collaborative that emphasizes the team model was proposed. This model is based on the priniciples of Quality Assurance: a systemic approach, use of data for decision making, teamwork and orientation of service improvements to for client´s satisfaction. The essential part of this model is the empowerment of the districts to initiate and try changes in the provision of services so that providers obtain the best results in the key indicators of the clinical IMCI algorithm. This algorithm is based on the continuity of health services for ill children from their homes to the reference centers.

The purpose of the collaborative learning was to achieve adaptation and dissemination of knowledge in multiple places, with three important objectives in mind:

Dramatic improvement in the quality of care and results achievement, in the short term in accordance with proposed indicators

Interchange of strategies to improve the services among participating teams in the collaborative learning

Planning for the dissemination of the new learning model to other districts

In order to achieve the empowerment of teams and to strengthen the process of decentralization, it was decided that the collaborative teams would work in a set of the processes for improvement including their respective indicators while utilizing their own initiative, creativity and capacity to achieve the improvements and to share their experiences, achievements, difficulties and lessons learned in a permanent form, without depending on central level coordination.

The members of this first collaborative effort have become agents of change and advisors for the new teams that decide to implement this model in their areas of work.

Development Process

The central and local team of URC/*Calidad en Salud* prepared a Quality Assurance Plan for the MSPAS, in which the collaborative model was included. In collaboration, central staff members from URC/Bethesda and *Calidad en Salud* and a representative from the Quality Assurance Project (QAP) in Nicaragua, presented the improvement proposal to MSPAS authorities at the central level to obtain their support to organize the implementation teams and to initiate the improvement activities.

The central level authorities supported the plan and the central level team was created; with this team a meeting of experts was carried out to define the processes and indicators to improve in the districts where implementation of the model would be initiated.

Calidad en Salud, with coordination from the clinical IMCI component, made visits to 8 area directorates to socialize the plan, to gain support to initiate selection and organization of 2 district teams per health area, to participate in the collaboratives and to agree on a date for the first learning session. During this session the processes and indicators improved proponed by the central level would eventually be discussed and approved by collaborative teams.

In June 2003, the first learning session took place with 2 district teams per area, with the exception of Ixil which named 3 teams, the reason why there were 17 instead of 16 district teams in total. Presented to the districts were the general implementation guidelines and the processes and indicators proposed which were revised and approved. The operative plan was discussed, which included a baseline, weekly measurement of the indicators, the analysis of the data and the decisions working process.

Following the first learning sessions, the first period of action was initiated during which the baseline survey was conducted and the first four weekly measurements of indicators and processes to improve were taken. In July and November 2003 new learning sessions were conducted, in which the districts shared lessons learned during the actions periods. In this way, participants had the opportunity to learn about the experiences of others and to put them into practice. The learning sessions also were of use for sharing quality themes to strengthen the collaborative activities.

In between the learning sessions, the technical staff in charge of giving support to the collaboratives offered help to the districts, visiting them directly and reinforcing the correct use of the indicators, the correct verification of their measurement, documentation, decision-making and in their socialization in and outside of the area level.

The health areas stated that they are prepared, starting January 2004, to analyze the guidelines to expand the collaborative model to districts where the process was not originally introduced, and that they will initiate this process.

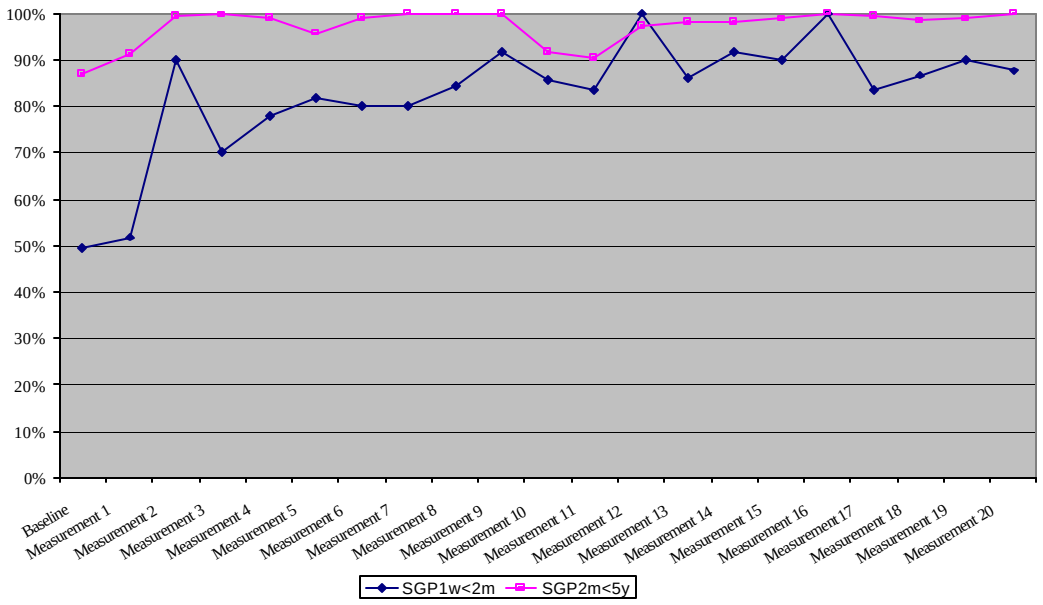
Measurement of indicators for processes of improvement

Graphs demonstrating the tendency of each of the indicators that are being measured are presented below to show the changes in the quality of care that are a result of the collaborative teams. The measurements represent two different age groups of children for IMCI: children one week to two months old and children two months to five years old. The baseline will be presented as well as the weekly measurements taken until one week prior to the third learning session which took place on November 18-19, 2003.

Percentage of children whose general danger signs were verified

In this indicator in the group of children aged one week to two months old, a permanent improvement was observed. The baseline was 50%, but reached 88% by the 22nd week of measuring. In the group of children two months to five years old, the baseline was 88%, notably higher than the baseline for the other group, that reached 100% by the 22nd week.

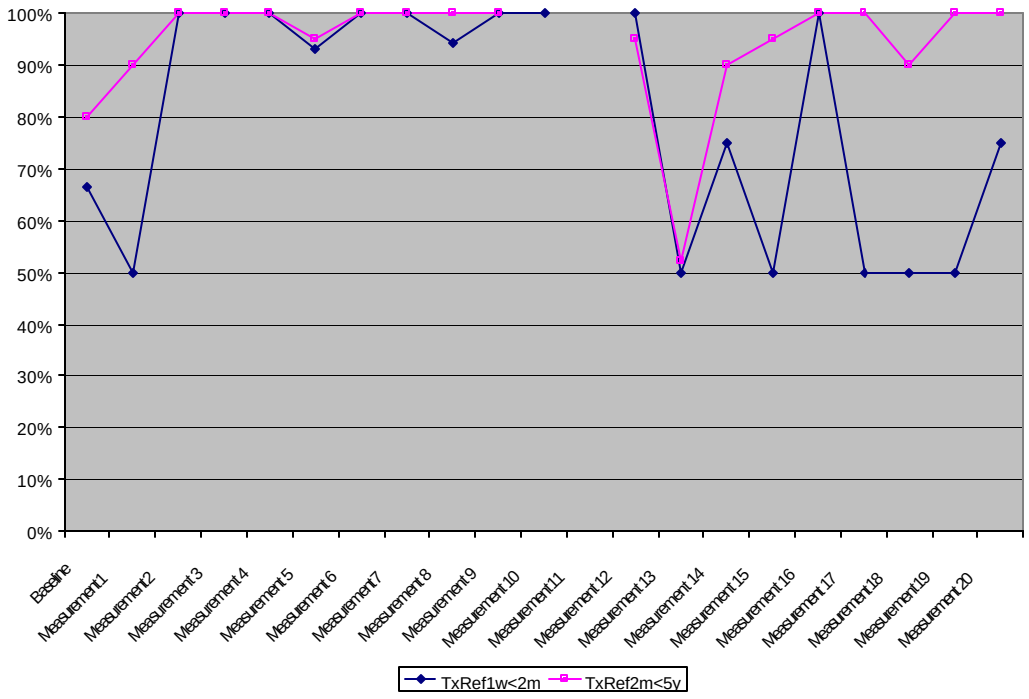
Graph 2: Percentage of children whose general danger signs were verified



Percentage of children with general danger sings that receive adequate treatment prior to referral

In the group of children two months to five years old, the baseline was 80% for this indicator. Eventually this indicator improved to 100% of adequately treated children prior to referral, as recorded in the last measurement. It is worth noting that in week 13, the registered value for this indicator was only 30% given that recently trained IMCI providers who had little experience were included in the documentation process. In the group of children one week to two months old, a decline in registration of treatments prior to referral was observed.

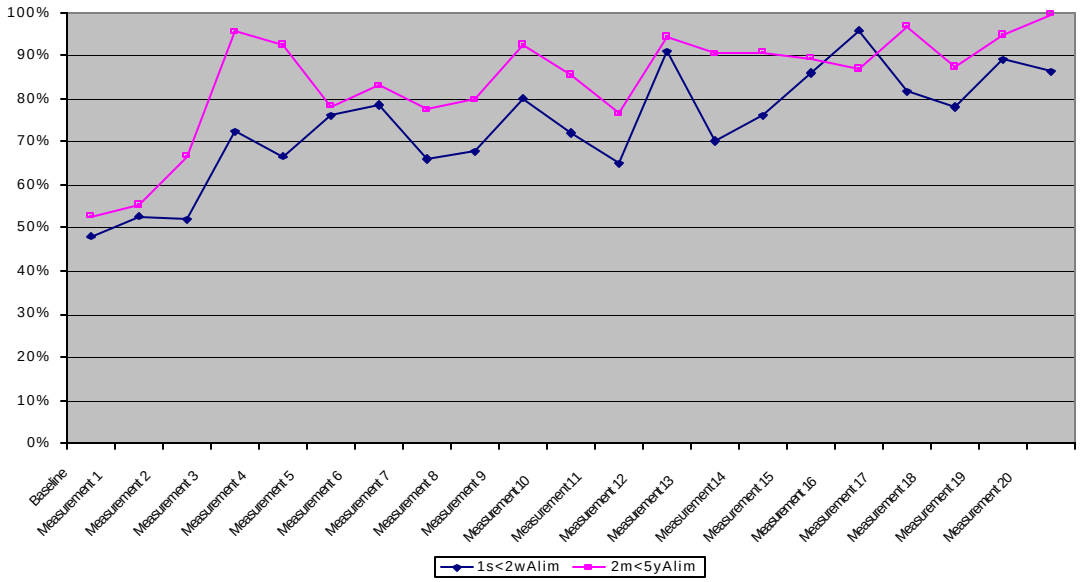
Graph 3: General danger signs and adequate treatment prior to referral



Percentage of children whose nutritional status was verified

In the group of children one week to two months old the baseline for this indicator was 48%, but reached a value of 85% by week 21. In the group two months to five years old the baseline was 52%, but reached 100% in the last measure. Analyzing these tendencies, a permanent improvement is observed in both groups, nevertheless, during some weeks the value of this indicator for both groups fluctuated, either dramatically increasing or decreasing. In a search for the causes of these fluctuations, consulting with the teams, they confided that to complete all requirements for nutrition evaluation is very complicated. There are many tasks to evaluate nutrition and providers forget to check of which ones have already been accomplished. According to the teams, nutrition is considered one of the most difficult to evaluate and needs close and constant monitoring.

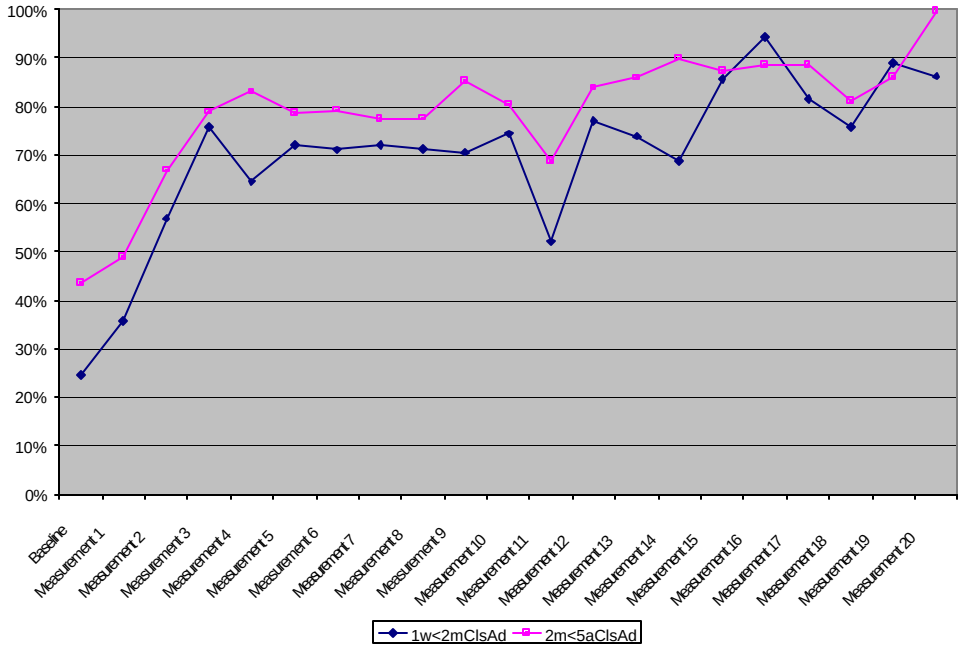
Graph 3: Percentage of children whose nutritional status was verified



Percentage of children adequately classified

This indicator improved in both age groups from the time the baseline was measured, although data show more positive results for the group aged two months to five years old. In the group one week to two months old, the baseline was 50%, but reached 87% of children with illnesses prevalent in childhood who were adequately classified. In the group two months to five years old, the baseline was 52%, but reached a value of 100%.

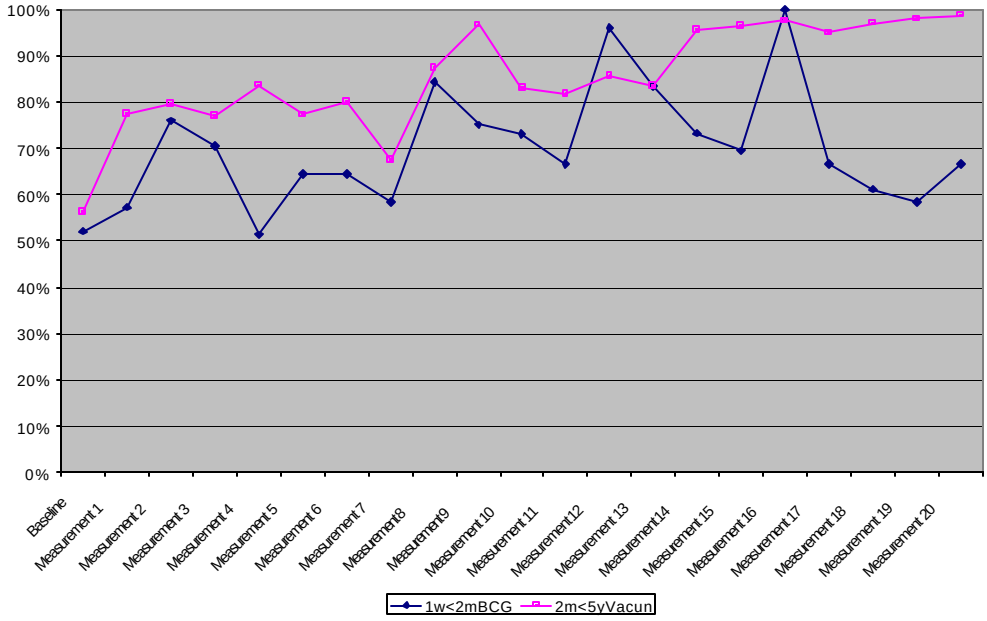
Graph 4: Percentage of children adequately classified



Percentage of children who are registered as needing a vaccination and are administered it

In the baseline for the group aged two months to five years old, 58% of children were identified as being registered for a vaccination and receiving it. Comparing the last measurement with the baseline an improvement can be observed and following week 15 the tendency towards improvement was established. In the group one week to two months old, the baseline was 50%, but improvements were observed in some weeks, but after the week 18 measurement, there was a decrease in the registration of the administration of vaccinations. The principal problem with this indicator is not that vaccinations are not administered, but that their administration is not recording on the registration sheets, which can be verified by reviewing the SIGSA vaccination forms that show the vaccination was indeed administered. Additional work with the collaborative teams is being done to ensure that providers that identify the need for vaccinations, adequately record their administration.

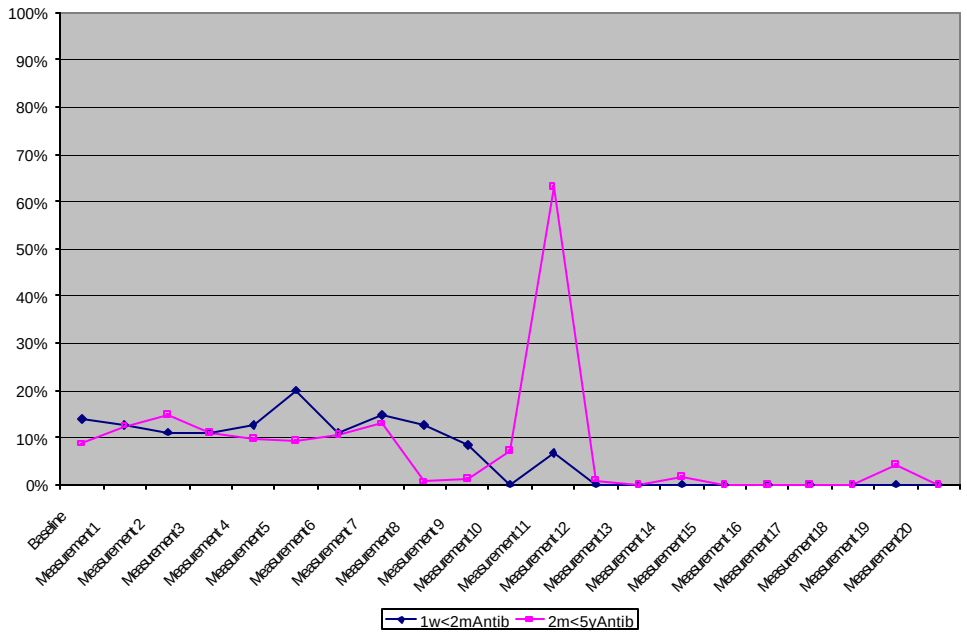
Graph 5: Percentage of children identified as needing vaccination the day of their consultation that actually receive them



Percentage of children that are prescribed antibiotics and do NOT need them

The unnecessary prescription of antibiotics has been a problem in the past in child health care and continues being a challenge to IMCI to guarantee that antibiotics are not prescribed to those children not requiring them. From the trend in data, it can be observed that in both age groups antibiotics are not being prescribed when not necessary, with the exception of a small percentage of children aged two months to five years old. The reason for this exception is due to inexperience of recently trained personnel who were including in the measuring process of this indicator. Once their skills improved, measurement of this indicator improved.

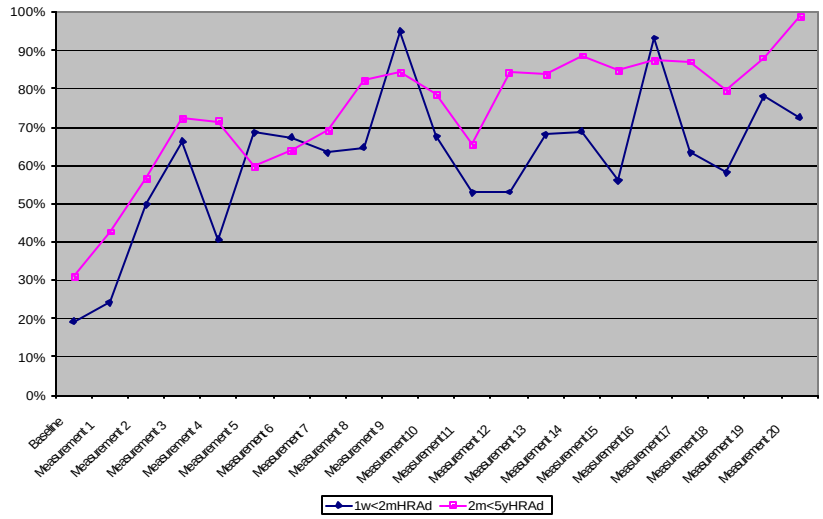
Graph 6: Percentage of children that are prescribed antibiotics and do NOT need them



Percentage of registration sheets adequately and completely filled out

In the group aged two months to five years old the baseline was 30%. Since then 100% of registration sheets have been adequately and completely filled out as recorded in the last measurement. In the group one week to two months old, from a baseline of 20% the value has reached 72% of cases where the registration sheets are adequately and completely filled out. A slight improvement in measurements 10 and 17 above 90% was observed which explains the need to maintain a permanent revision of the quality of registration and team consensus decision making to continue to improve.

Graph 7: Percentage of registration sheets adequately and completly filled out



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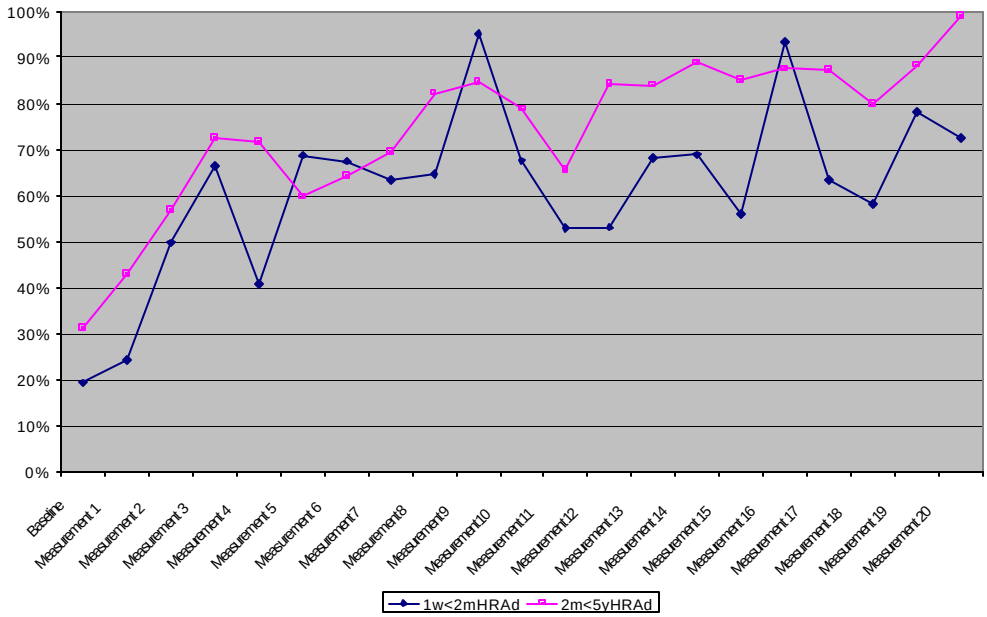
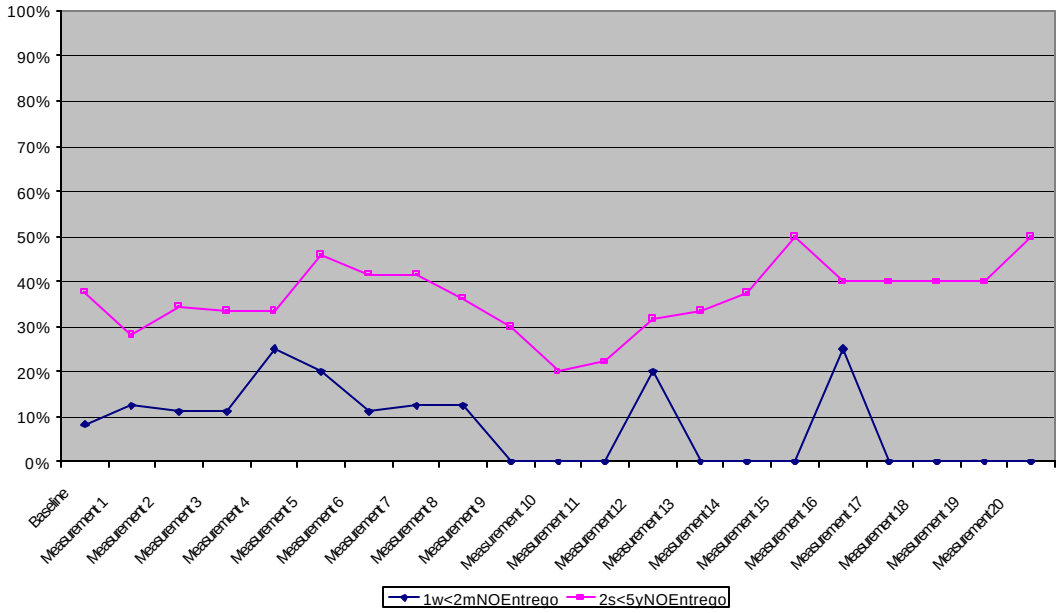
Graph 8: Percentage of registration sheets adequately and completly filled out



Percentage of children that are prescribed antibiotics and do NOT receive them

The percentage of prescribed antibiotics that were not delivered has increased in the group of children two months to five years old. This situation initially occurred in the group aged one week to two months old, but following the 10 week measurement the problem was resolved. The only exceptions were week 13 and 17 when a shortage of antibiotics affected both groups, but mostly the group aged two months to five years old.

Graph 9: Percentage of children that are prescribed antibiotics and do NOT recieve them



In the process of developing the model, strengths and weaknesses have been identified which are presented below as elements to keep in mind when expanding this program to other districts.

Strengths

- Weekly measurement of indicators and discussion of data with all district collaborative teams
- Standardized electronic registration of data in all participating districts
- Constant revision of registration sheets to guarantee their quality
- Documentation of good work performance by IMCI service providers

Weaknesses

- Despite of the fact that the teams have learned how to review indicators on their own, they still need help to constantly review them
- Little care in the review of registration sheets
- Fear of showing falts in the tendency of indicators in spite of the trust that exists among health area personnel
- Difficulty in bringing together all team members to analyze data and make decisions to improve
- Lack of in-depth analysis of data due to lack of time because of other obligations

Health establishments provide quality maternal and child health services

Monitoring Tutorial

In 2003 monitoring tutorials continued, by accompanying facilitators to reinforce quality performance of care. The following graphs are a presentation of numbers of personnel who have received tutorials and the effect that the tutorials have had on their work performance.

Coverage of tutorials

As is observed in the following table, professional nurses have received the most tutorials or 68% of them, followed by health center physicians, 59%. The least covered group was the health center and post auxiliary nurses who were only covered by about 46%.

Table 17 - Percentage of personnel trained that received tutorials

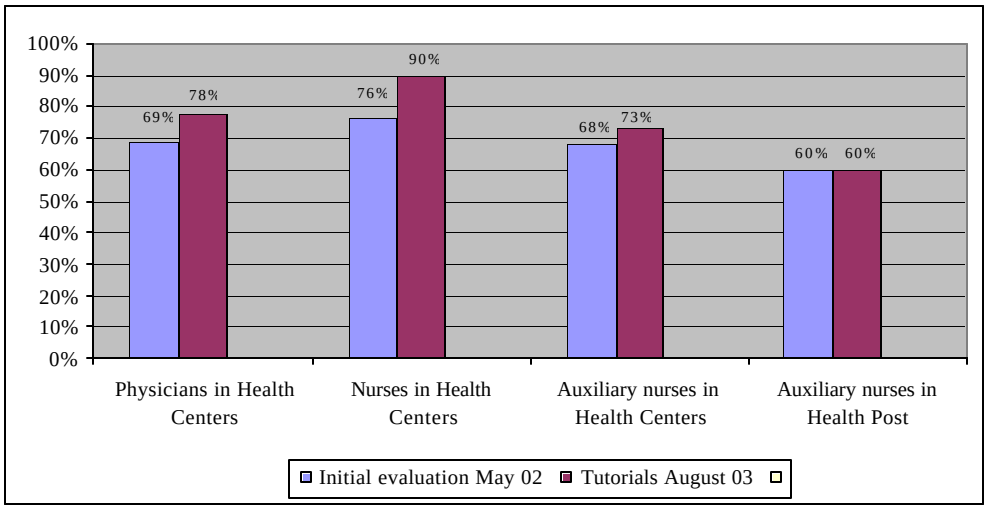
Type of Personnel	Trained	With tutorials	Percentage of tutorials
Health center physicians	128	76	59%
Health center nurses	111	75	68%
Health center auxiliary nurses	452	218	48%
Health post auxiliary nurses	380	172	45%

Performance of Personnel

The following graphs show the performance level of personnel that received the tutorials as compared to the results of the initial phase of evaluation. The performance level of health center physicians, nurses and auxiliary nurses improved. The only exceptions were the health post auxiliary nurses whose level of performance did not improve.

From the data it can be concluded that the priority of the tutorials needs to change to be more oriented toward the health post auxiliary nurses given that they often offer services alone, are responsible for a large population and are in close contact with the community, with the possibility of having a larger number of consultations and sever cases to attend to.

Graph 10: Percentage of providers who received tutorials that apply the IMCI strategy



Evidence of improvement in the quality of care as a result of the implementation of the IMCI strategy.

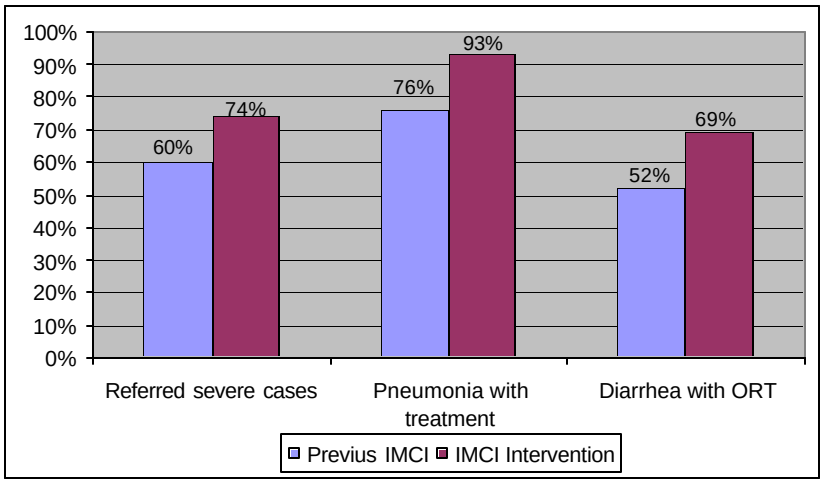
It is important to note that implementation of the IMCI strategy is showing results. Just three years after the MSPAS National Declaration to implement the strategy, there is evidence that the proposals included in the declaration are being respected, given that mothers and children under five that have solicited services have benefited from an improved quality of care. The improvements are illustrated in the following graphs, in which the results before and during the implementation of the IMCI strategy can be compared (See graph 11).

- Prior to implementing the strategy, 60% of children with severe illnesses were identified in the service centers and referred to a superior level of care where there are specialized resources to provide children with a better chance of surviving; measurements during the implementation of this strategy show the data has increased to 74%

- In relation to children identified with pneumonia that are receiving appropriate antibiotics, the value has increased from 76% to 93% which indicates an improvement in the quality of care

- Similarly, the management of diarrhea cases has improved as cases are adequately being treated with oral rehydration therapies as shown by an increase in value from 52% to 69%

Graph 11



* Coverage of vaccinations

Immunization

At the national level, all biological indicators are below 90%. A 25% goal was expected for the first quarter. None of the 8 areas supported by *Calidad en Salud* achieved the 25% goal expected for the first quarter. Polio 3, MMR and DPT 3 are 6% below the target of 25%, BCG is 3% below.

Table 18 - Immunization Among Children Under age 1 for BCG, DPT 3, Polio 3 and MMR for children 12-23 months of age.

Vaccination	Annual Target	Achievement
Polio 3	90	94
DPT3	90	94
BCG	90	96
MMR	90	93

Table 19 shows that none of the 8 priority DAS achieved 25% of the target set for the first quarter. Regarding Polio and DPT, greater emphasis is required in Quiché, Ixil, Huehuetenango and Sololá; in BCG efforts should focus on Quiché, Huehuetenango and Sololá; and in SPR, in the DAS of Quiché, Quetzaltenango, Totonicapán, Sololá and Huehuetenango. In May 2002, the National Immunization Program will launch a nation-wide follow-up campaign to achieve greater coverage in Measles, Rubella and Polio. *Calidad en Salud* will provide specific technical assistance to the area personnel, both at the service and community levels. This assistance will focus on technical and regulatory issues, the publishing of booklets with updated information for the health personnel, and in the provision of transportation to mobilize the vaccination brigades.

Table 19 - Vaccination Coverage from January to March 2002, by 8 Priority Health Area

Vaccination	Annual Target	Polio 3	DPT 3	BCG	MMR
Chimaltenango	90	87	87	89	90
Huehuetenango	90	90	90	95	89
El Quiché	90	90	90	95	89
Totonicapán	90	87	87	90	87
Sololá	90	95	95	93	94
Quetzaltenango	90	97	97	100	96
San Marcos	90	93	93	98	91
Ixil	90	88	88	79	89
Total	90	93	94	96	93

Limitations

In regards to the tutorials, 100% of trained personnel did not receive them for reasons that have been manifested by the districts and areas, including, among others, the difficulty in the flow of information produced by the centers in relation to the tutorials to be analyzed technically and by the central level.

2.1.3. AIEPI AINM-C Case Management (AA-MC) Results

Results

The AIEPI-AINM-C strategy's Integrated Case Management component contributes directly to results one, defined as the increase in the use of health services. This component offers the basic health teams that work in the community centers (ambulatory doctors and nurses, institutional and community facilitators) the tools that aid in achieving integrated, standardized quality care for the two priority groups of the population: women of reproductive age and children under five.

This component of the AIEPI AINM-C strategy is intimately related to the Health Promotion and Disease Prevention component, as well as with the methodology for Community Participation. Both are fundamental for achieving the main objectives including: contribute to the decrease of infant, maternal and neonatal mortality and refer timely serious cases to the appropriate care levels. It is also intimately related to the IEC processes, since it supports the various job aids for counseling, in order to relieve an adequate case management, as well as to refer women and children classified as severe cases. Logistics is essential for MIC as it is the fundamental tool that ensures all supplies are available to apply MIC.

The main results for this component during the year 2003 were as follows:

- Incorporation to all training and job aids materials the suggestions from the IEC team to standardize them with the counseling structure and icons.
- Training for the Areas and Districts teams in the performance monitoring tutorial, as follow up to the training of community facilitators, ambulatory doctors and nurses and some institutional facilitators.
- Facilitators from eight Health Areas participation in the process of training from the monitoring of the indicators used in the AIEPI AINMC strategy

- Participation in the development and testing of instruments, as well as in the training in supervision-facilitation at the community level

- Participation in the management strategy follow up meetings with the eight DAS and follow up visits for the community level

- Coordination of participation in the information gathering and consolidation of the current MIC status

- Participation in the initial training of trainers to facilitate expansion of the strategy to other DAS

- Standardization of all training and job aid materials by incorporating the Minimum Expected Weight Gain Table

- Conclusion of MIC training for ambulatory doctors and nurses and institutional and community facilitators in the eight Health Area Directorates

- Participation with the team that developed a process to determine indicators to monitor the AIEPI AINM-C strategy

- Participation in the monitoring component and support for PROSAN to adjust the SIGSA forms in order to collect the information required to calculate the indicator from 2004 on.

- Participation in the review and drafting of ENSMI 2002 final report

Institutionalization

During 2003, institutionalization of integrated case management was strengthened in several ways. Active participation of two staff members from the *Programa Nacional de Salud* Reproductiva (PNSR*)* in the different processes developed by the AIEPI AINM-C team is one example. Modification of growth monitoring and promotion norm for children under two where monitoring is done monthly is another. Also, the use of the minimum expected weight gain table for children under one year and the use of the tendency of weight for those older than one year is an important step towards institutionalization.

Furthermore, use of counterpart funds in the Integrated Case Management training of community facilitators from the eight Area Directorate has been a priority as well as personnel involvement from the eight DAS in the performance tutorials and supervision-facilitation activities for MIC community providers. Additionally, the joined coordination between UPS-1 and the technical normative coordinator of the strategy in the design test and approved specific form to gather information on the current status of Integrated Case Management form, as well as to encourage personnel participation from the DAS in the collecting of this information.

Another activity was the relieve that the *Unidad Ejecutora* would use counterpart funds to print registration sheets, child health carnets, reference forms and counseling sheets to care for sick children; this material was necessary for the extension of coverage process in the eight DAS. Also, requested by PROSAN 2,000 issues of each of the technical pamphlets for the three new norms, requested by PROSAN were copied by the *European Union*. As a result the materials available are uniform throughout the country.

Coordination and Planning

During 2003, there were several results in coordination and planning. *Calidad en Salud* participated in the AIEPI AINM-C central level strategy team meetings to work towards standardizing the process of follow up to the implementation and expansion of the strategy.

The MIC component also participated in the monthly area facilitators and primary level facilitators' meetings for the coordination and communication on guidelines for integrated case management activities to be developed during the current year at the local level. The meetings were interactive and dynamic as feedback was not only provided, but received as well.

Participation in the coordination with AID partner NGOs for expansion of the AIEPI AINM-C strategy in the MIC component to the Alta Verapaz Health Area. Also, participation in the national technical group coordinated by PROSAN and SEGEPLAN, to develop the food security and nutrition policy proposal to be presented to the incoming government. Advocacy activities took place with political parties, in order for them to incorporate Agreement issues in their government plans.

Materials

Several results were achieved related to the MIC training and job aid materials. One of the main results was the, review and approval by the Ministry of Health of the IEC proposals for new MIC posters, protocols and women and children's registration sheets design; also the change of the counseling flip-charts, one for children and one for women. 1,000 sets of MIC training materials were distributed to the eight DAS, to train community facilitators and new personnel. 4,500 child registration sheets and 4,500 women registration sheets were delivered to the community centers participating in the San Marcos operations research. Six complete sets of the MIC materials were shared with AID partner NGOs that support the Alta Verapaz Health Area, as well as with the Nicaraguan Delegation that visited the country and with staff from the European Union's PRAC project. *Calidad en Salud* also participated in the design, reproduction and delivery to PROSAN of 2,000 manuals on the new norm for monthly growth monitoring and 2,000 of the *amigos de la lactancia materna*. A diskette containing formats for performance tutorial instruments was delivered for each one of the 8 DAS.

Equipment

Delivery to the eight Health Area Directorates of 1,500 hand held lamps (with the strategy's logo) used for throat exams. The distribution responds to the number of MIC trainers, ambulatory doctors and nurses and community facilitators. Each community center has also received a salter type scale for weight in pounds, provided by the *Unidad Ejecutora,* similar to the scales given to the *Vigilantes de salud.*

Training

During the current year the training for MIC providers was completed for ambulatory doctors and nurses and community facilitators from the eight Health Area Directorates.

Through the MIC training processes developed during this year in the eight DAS, 922 community facilitators and 168 institutional facilitators were trained. (See Trainings Table).

Tutorials After Training

In order to strengthen the performance of trained personnel, there is team agreement that the MSPAS's IMCI service level instrument will be the same to monitor MIC, making the necessary changes and incorporating aspects related to the case management for women. With this in mind the changes were proposed for the instrument developed, reaching 90% approval of the proposed changes.

Calidad en Salud participated in the monitoring and performance tutorial training of personnel from the eight Health Areas for the two components of the AIEPI AINM-C strategy.

Through the monitoring activities that the central level AIEPI AINM-C team has carried out at the DAS and community centers, it has been established that measures can be taken to improve MIC implementation. The following are several worth mentioning: a) lack of registration sheets, b) medicine shortage, c) inadequate tutorials of the DAS training replicas, and d) inadequate use of the training guide by some trainers. Some corrective measures have already been taken to improve some of these aspects, such as the reproduction of the registration sheets with *Unidad Ejecutora* funds and coordination with the logistics team for support in the medicine's management.

Supervision, Monitoring and Evaluation

The MIC component participated in the team effort for definition of the indicators and the monitoring and supervision-facilitation instruments of the two AIEPI AINM-C strategy components. (See Results 3). The Integrated Case Management instrument also was developed.

Integrated management meetings for AIEPI AINM-C monitoring and follow up were held in the eight DAS, in order to provide technical assistance and support in problem solving, during strategy implementation with emphasis on MIC, including visits to the field and community centers. It was discovered that the MIC methodology is not systematically applied, that there is a lack of medicines, and that there are many problems in the way information is recorded. Necessary recommendations were given, as well as feedback to the local teams.

Calidad en Salud participated in the training for supervision-facilitation and monitoring activities at the community level with emphasis in the AIEPI AINM-C strategy for representatives from the eight DAS , developed in Chichicastenango and Quetzaltenango (See Results 3).

MIC Status

Through the application of the official UPS-1 form on the current status of Integrated Case Management, information was collected with the participation of the personnel from the eight DAS. In coordination with the systems support component the information was consolidated by area level personnel as well as in general, which is of vital importance for the implementation of this component of the strategy. The following deficiencies which make the application of the Integrated Case Management for women and children difficult were observed. The information was gathered between the months of July and September in 34 health districts of the eight DAS of the Agreement, and in a convenience sampling of about 10% of the community centers. These centers belong to all of the NGOs, both administrative and service providers. The total of community centers participating was 160, or 13% of the existing centers in these eight DAS. The information was gathered by interviews with 100 doctors or ambulatory nurses, with 10 institutional facilitators and 86 community facilitators

The main results obtained were the following. 57% of the ambulatory doctors and nurses as well as 62% of the community facilitators interviewed indicated they were applying the MIC. Not all those interviewed had a watch with a second hand, or the children and women's protocols that were given to them at the training. They reported having the children's protocol more often than the women's protocol. 7% of the community centers do not have a scale for weighing children under five. A great majority of the centers do not have the three minimal prerequisites for training of personnel on the Copper –T insertion. (Stirrup stretcher, autoclave, a door in the room where the people have health attention) Only 13% had an autoclave. The majority of the centers did not have the support materials for counseling or for referrals. 41% of the centers did not have child health carnets and more than 30% did not have the basic SIGSA forms for information recording. Between 35% and 40% of the CC had the necessary forms for a good logistics system. None of the community centers had a complete listing of the basic medicines for children. Medicine availability for women was worse than that for children. 44% of the centers had family planning methods that can be given at the community level (condoms, oral contraception and Copper-T). That did not necessarily mean supply, only the availability at that moment. The methods were delivered to 16% of the centers by the districts and to 46% by APROFAM. 51% of the community centers recorded all the classifications in the SIGSA 3P/S; 68% recorded all of the supplied medicines in this SIGSA. The medicines not supplied were never recorded.

Specific information for each Health Area Directorates was socialized at the central level and in the Area technical teams and some corrective measures have been taken to improve that situation. Among them are the following: the districts have reviewed, in conjunction with the accountability staff and managers from the NGO, the results obtained and the budget executions, reprogramming have been made, with priority given to the purchase of medicines. The districts have become aware of their responsibility in the service provision by each NGO, and have concluded that the tutorial, monitoring and supevision-facilitation on the part of the district or the NGO are important. Production of the child health carnets, registration sheets, reference forms and counseling sheet for sick children was centralized with the *Unidad Ejecutora;* the costs have been discounted from the budget of each DAS,

which will help with its specific budget execution. These materials are being distributed in each DAS, to be given to the NGO.

Limitations

- The norm for the use of integrated case management by the FC is still weak, and often depends on the opinion of ambulatory doctors and nurses
- The long development and review of MIC materials has resulted in the delay in strengthening activities for providers
- The areas and districts have not totally assumed the strategy's tutorial, monitoring and supervisión-faciliation activities
- The DAS teams do not systematically use the instrument monitoring of the training replicas resulting in the fact that not all the activities are documented
- Changes of NGOs and the constant turnover among ambulatory doctors and nurses has delayed the implementation of the MIC component, since new personnel has had to be trained; also sometimes trained personnel take the materials they have been given at the training
- One of the fundamental factors in the delay for applying integrated case management provision of services has been the difficulty and lack of compliance by the MSPAS in allocation and disbursement of the NGO's funds. This is specially related to job aids reproduction, purchase of basic medicines and SIGSA and child health carnet reprinting
- The agreement between APROFAM and the MSPAS for delivering family planning methods to the NGOs for the extension of coverage process is inadequate, which results in lack of family planning methods supplies in the majority of the community centers
- There are delays in the materials distribution process at all stages: from the UE to DAS, from DAS to the districts, from the districts to the NGOs and from the NGOs to the community centers, for this reason many places still do not have all the necessary materials
- Some community centers are situated in municipal building corridors or in schools corridors without any infrastructure conducive to providing health service care, which in turn results in inadequate evaluation of children and/or women

2.1.4. Micronutrients Results

During 2003, development of the Agreement's work plan related to micronutrients continued to advance, mainly iron and folic acid. Technical assistance was directed towards the strengthening of the skills of technical personnel from the *Programa de Seguridad Alimentaria y Nutricional* (PROSAN), responsible for implementing the micronutrient norms within the MSPAS. Vitamin A, another fundamental micronutrient for integrated health services for children, also was incorporated, both in the preventive aspect as well as for the treatment of specific pathologies.

Results for the micronutrient component for 2003 include the following:

- The capacity of PROSAN technical personnel to review, update and modify iron and folic acid norms was strengthened; a preventive rather than simply curative approach for women of reproductive age and children was emphasized during the capacity building
- *Calidad en Salud* coordinated with PROSAN and World Vision (Vitamin A project) to strengthen the supplementation of Vitamin A for children between the ages of 6-36 months

- *Calidad en Salud* provided technical assistance to PROSAN to gather and distribute information, as well to keep all personnel from *Calidad en Salud* and the eight DAS informed of the Ministry's decision to update the Vitamin A initiative nationwide in October, and to determine the availability of supplies available in the DAS to cover the target population

- The process to determine the invested amounts by the government or donated by other agencies for the purchase of micronutrients (iron, folic acid and Vitamin A) for services and for the extension of coverage process, in coordination with UPS-1, PROSAN and UNICEF was initiated

- Institutionalization of training activities on new norms in all health areas of the country were conducted by PROSAN technical personnel

- *Calidad en Salud* assisted PROSAN in officially requesting the incorporation of the three new norms into the SIGSA forms, so that required information including micronutrient supplementation for women and children is recorded and available

- *Calidad en Salud* helped to update the tutorial, monitoring and supervision instruments with included information on the three new norms

- *Calidad en Salud* coordinated with La Leche League and CONAPLAM to train 100 individuals that monitor breastfeeding so as to create community demand for micronutrient supplementation

Institutionalization

The institutionalization process was strengthened in the following aspects during 2003: a) officialization of the three new norms on May 9; b) 18 local training activities for the three new norms at the DAS that are not included in the Agreement 520-0428, organized and developed by PROSAN with other funds; c) incorporation of the *Iniciativa de Servicios de Salud Amigos* and the weekly hospital supplementation, in the UPS-III objectives and planning; and, d) incorporation by UPS-1 of the needed financial resources for the application of the new micronutrient norms for women and children, in the budget that the MSPAS gives to the NGOs for the extension of coverage process.

Coordination and Planning

During the current year coordination with PROSAN and other agents was strengthened for micronutrient interventions. The results are detailed below:

- Motivation, negotiation and convincing of PROSAN's technical personnel of the need to review, update and modify the approach of the new norms for iron and folic acid to ensure they are used as preventative measures was achieved. Also, technical assistance was provided to plan, socialize and execute training in the new norms, which resulted in the development of 26 local training activities.

- Support in the process initiated by PROSAN with World Vision related to Vitamin A. This process helped to obtain information on the supplementation coverage with one dose in children less than one year, taken in July 2003. The information gathered showed that 89% of the country's municipalities had Vitamin A coverage between 0 and 50%. The MSPAS determined the need for a national activity to update Vitamin A during October 6-10. The goal was to increase Vitamin A supplementation by a minimum of 20% on the figure achieved in all municipalities in July 2003. Area and 1st-level facilitators were socialized in the official presentation and materials in order to strengthen interventions. UNICEF provided information on the amounts of Vitamin A needed to cover the population within the parameters of the norm, and it was found that the purchase cost was Q160,634.00, the Vitamin A was donated by UNICEF to the country.

Materials

The micronutrient component's results for 2003, related to materials, are the following:

- Development and reproduction of 2,000 issues of each of the technical leaflets, on the new norms, in coordination with PROSAN
- Coordination with Dr. Viteri for the development and multimedia presentation on the technical basis of support for the new iron and folic acid norms, which was edited and is available on CD and VHS
- Review, update and production of the multimedia presentation "*Guatemala un Futuro Resplandeciente*" based on the *Profiles de Linkages* analysis, and used as a frame of reference in the presentation of the new norms; CD production containing all the presentations carried out for the socialization of the new norms
- Delivery of 20 sets of new norm leaflets to the NGOs (Mercy Corps, CARE, CRS and International Plan) personnel and to the personnel from the Alta Verapaz Area, as well as the Nicaraguan delegation who visited Guatemala and the personnel from the European Union's PRAC project; the European Union granted a request from PROSAN to reprint another 2,000 issues of each of the new norms
- Incorporation of boxes to record micronutrient supplementation in the new child health carnet design
- Reproduction and delivery to UPS-III of 40 issues of the *Hospitales Amigos* self-evaluation form
- Design of an integrated micronutrient supplementation dose table (iron, folic acid, Vitamina A, and Iodine) according to each priority group in order to make the norms operational; this material will be reviewed in conjunction with the IEC component and will hopefully be reproduced next year
- Reproduction of 14 sets of technical leaflets that contain updated information on Vitamin A supplementation; they were distributed to 1st-level facilitators

Equipment

During the current year, a computer system consisting of a computer, printer, UPS (uninterrupted power source) and a CD burner was donated to PROSAN. This equipment is under the responsibility of the micronutrient component specialist and will be used for all new norm recording and the follow up process.

In coordination with the finance and administration component another computer equipment system was donated to PROSAN by the *Unidad Ejecutora*, for use by the specialist in charge of the breastfeeding component.

Training

The following were 2003 results for training in the new norms:

- For the socialization activity, 200 individuals were trained: they were from the Ministry of Health the *Secretaría Presidencial de la Mujer* (SEPREM), the 26 Health Area Directorates and representatives from cooperating agencies and NGOs that work with the maternal and child health group
- PROSAN personnel have trained 30 representatives from each of the 26 DAS technical teams in the three new norms, for a total of 780 trained individuals
- Through the MIC training processes developed during 2003 in the eight DAS, 922 community facilitators and168 institutional facilitators were trained
- 20 members from the Alta Verapaz Area and the NGOs that support them were also trained

- 7 area facilitators, 10 1st-level facilitators from the Agreement and 26 persons responsible for promotion in the DAS were trained in the new norms and the update methodology for Vitamin A supplementation

Supervision, Monitoring and Evaluation

Through team work in order to establish AIEPI AINM-C strategy indicators and monitoring and supervision-facilitation instruments (See Results 3), information related to the new norms was included.

In the integrated management meetings for monitoring and follow up of the AIEPI AINM-C in the eight DAS, the micronutrient component was reviewed and it was determined that some districts have already begun weekly supplementation of micronutrients.

During field visits to the community centers to conduct follow up to MIC, it was determined that some have already begun the weekly supplementation, but not systematically, since they do not have available supplies of these micronutrients to cover at-risk groups. Also found were community centers where the community facilitator was vaccinating, but there was not Vitamin A to give to the children. Recording of information was another problem found, both on the SIGSAs and the child health carnet. The necessary recommendations were given as well as feedback to the local teams.

Limitations

The findings of the current MIC status from 160 community centers reflect the limitations of the extension of coverage process to apply the new weekly supplementation of iron and folic acid norm. It also illustrates the reasons for the low coverage of Vitamin A supplementation for children from 6-35 months and 29 days; these limitations are summarized as follows:

Related to supplies: 59% of the community centers report having child health carnets; an indication that more carnets are needed to record the micronutrients they have given. Only 57% of the community centers have folic acid tablets that are necessary for both children and women. 61% have pediatric iron and 70% have iron to cover priority groups (women of reproductive age and children) in the absence of a syrup or dropper. 56% of community centers have Vitamin A capsules.

Related to the recording of information: The registration of weekly iron and folic acid supplementation for children and women of reproductive age is not possible at the moment through SIGSA. There are no local level or national level records for anemia or neural tube defect problems. The only study that provided data on anemia was the national micronutrient survey conducted in 1995. Periodic indicators are obtained through the ENSMI. The recent ENSMI 2002 report provided the following results:

- 39.7 % of children younger than 5 have low hemoglobin levels, with the incidence being greater for those children younger than 2 years old and those residing in rural areas, particularly residents of the northeast region, and children.

- Of mothers without formal education, and with birth-spacing less than 24 months. 20.2 % of the women who are not pregnant have low iron levels, with the prevalence being greater in indigenous women, younger than 19, of rural areas, without formal education and being residents of the Peten. 22.1 % of pregnant women have low hemoglobin levels.

These results justify the need to strengthen the compliance with the new norms at the national level. As it was mentioned before, the official system for recording information does not currently have a way of registering the iron and folic acid supplementation for children younger than 5 and women of reproductive age, and for this year it was not possible to incorporate the information into SIGSA. Efforts will continue to incorporate this data in 2004.

In regards to financial aspects: The delays in allocating the MSPAS disbursements to the NGOs for the extension of coverage process and the limited coordination between the districts and its NGOs has resulted in the unavailability of iron and folic acid for the implementation of the new weekly supplementation norm. The MSPAS has no financial availability for follow up to the *Iniciativa de Servicios de Salud Amigos de la Lactancia Materna* norm.

2.1.5. OR on AEC-PS Results

Introduction

The Operations Research study, designed to compare the MSPAS Extension of Coverage Model (PEC) and two innovative variants (AEC ONG and AEC PS), continued to be implemented in three health areas. OR advancements for 2003 were: a great progress in community organization, training of community personnel, conduction of a baseline, monitoring and cost studies preparation and mid-term evaluation. Details for these results are presented below.

Community organization

The structure of PEC and its two variants are based on community organization and work to develop prevention and integrated case management focused interventions. PEC has a five-year history as a functioning organizational structure. AEC ONG will present USAID with a separate report on its activities.

For AEC PS variant implementation, MSPAS authorities at the central and San Marcos Health Area level committed their support to the process, assigned an intervention coordinator and allotted counterpart funds from the Agreement between the MSPAS and USAID for personnel, and additional costs generated by the process.

AEC PS followed UPS-I (*Unidad de Provisión de Servicios del Primer Nivel de Atención* of the *MSPAS*) guidelines for community organizing, with the following results: 39 community centers were created with19 FC providers: 7 FC and 14 CC in San Antonio; 6 FC and 14 CC in San Cristóbal Cucho; 6 FC and 11 CC in San Pablo, with MIC service provision. Residents living within thirty minutes walking distance can come to the community centers established in facilities donated by the local community where they can receive daily care from a community facilitator and bi-weekly or monthly care by a professional ambulatory nurse. These centers also function as meeting places for the VS, traditional birth attendant and general population for immunizations, pre and post natal controls, growth monitoring, micronutrients administration and other MIC care services. Nurse auxiliaries at the jurisdiction's health posts offer MIC care services.

The first step to organizing was the selection of community personnel (*Vigilantes de Salud*) from 61 communities from the San Cristóbal Cucho, San Antonio and San Pablo municipalities in San Marcos department. From this group the most skilled were then selected to be community facilitators. Individuals who functioned as birth assistants already within the community were located and integrated as trained traditional birth attendants. Three professional ambulatory nurses were contracted as well as three Ministry rural health technical advisors, the last ones to develop activities as institutional facilitators. There are voluntary personnel who meet monthly in the CC where they receive training on health topics. They in turn use this training for counseling the 20 families under their responsibility. VS also conduct preventive health activities and collaborate with the rest of the Basic Health Team (FC, FI and EPA).

Training and Service Provision

19 FC and 400 VS were trained in the AIEPI AINM-C Promotion and Prevention Modules I, II, III, 19 FC were trained in MIC and 58 traditional birth attendants on the Promotion and Prevention Module III.

Service provision activities started in April with some other services starting in May and June. Activities were adapted and both the census and sketch were completed for the 61 communities belonging to the three jurisdictions where growth monitoring and promotion is conducted monthly.

Baseline

In order to have indicator information prior to the intervention, a baseline study was conducted with local rural representation from three southwestern departments, (San Marcos, Quetzaltenango and Totonicapán) on each of the two variants and PEC. The baseline study was developed from January to March 2003, with data being presented to the IO Technical Team members at the central level in June 2003.

Information was obtained from selected residents among women of reproductive age (15-49 years) and each of these eligible women's children under five.

The baseline sampling included 3,431 homes and 2,588 eligible women. Response rate among eligible women was 93%. Information was obtained for 2,410 women from 15 to 49 years of age, and 3,845 children under 5. This information will be used to manage identified problems and eventually to compare results with the final evaluation.

Main results obtained for PEC and two variants baseline are:

- Illiteracy for participating PEC mothers was 58.9%, for AEC PS 64.5% and for AEC ONG 53.4%
- 39.2% of women from PEC received visits from community workers, 12.4% for AEC PS and 36.5% for AEC ONG
- 6.8% of women from PEC participated in health meetings, 5.8% from AEC PS and 15% from AEC ONG
- 46.9% of participating mothers from PEC stated that their children were weighed within the past two months, 15.7% from AEC PS and 33.5% from AEC ONG
- 31.1% of participating mothers from PEC stated that their children had diarrhea within the past 2 weeks, 38% from AEC PS, and 34.9% from AEC ONG
- 48.7% of participating mothers from PEC stated that their children had respiratory infections within the last 2 weeks, 55.4% from AEC PS and 51.6%from AEC ONG
- 16% of participating mothers from PEC stated that they did not have antenatal control for last pregnancy, 24% from AEC PS and 26% from AEC ONG
- 75% of participating mothers from PEC stated not having postnatal control for last pregnancy, 79% from AEC PS and 78% from AEC ONG
- For PEC participating women, 12% stated having used a family planning method, for AEC PS, 12% and for AEC ONG, 12.4%

For PEC participating women, 25.9%, stated they are using a family planning method, for AEC PS, 26.7% and fro AEC ONG, 25.6%.

Monitoring and Costs Study Preparation

Cost Effective Study: Development of a form for information collection, an instruction manual and a database created in Access that automatically generates costs type I and II (direct and indirect) consolidated for analysis. This base is applicable to the Module's three variants. The costs study was initiated in October. Data collection is to continue for analysis beginning in January, and completion in April 2004.

Open and continued communication has been maintained with the San Marcos Health Area Directorate. Additionally, a monthly meeting is held for Operations Research indicators and results progress monitoring.

Weekly meetings are held for the three jurisdictions and the San Marcos DAS, for monitoring progress in health service provision and problem resolution.

Meetings with the *Equipo Técnico de la Investigación Operativa* (ETIO) from Operations Research have been held to evaluate the process, having reached consensus on modifications to the final baseline report, Operations Research indicators, and the database use for collecting services production and costs study information.

Meetings with the Technical Support Committee (CTA) from Operations Research have been held as scheduled, reaching consensus and input for process improvement.

For the *Ampliación de Extensión de Cobertura en Puestos de Salud* (AEC-PS) variant, all institutional and community personnel provide integrated case management (MIC) in the *jurisdicciones* of San Marcos, San Pedro Sacatepéquez and San Pablo health districts from the San Marcos department.

The Health Area Directorate (DAS) and its personnel, with support from *Calidad en Salud's* local facilitator, conduct weekly supervision and offer tutorial training for the 3 *jurisdicciones*.

Mid-Term Evaluation

The mid term evaluation for Operations Research was conducted according to schedule in October, and results were presented both to USAID and MSPAS. The purpose of the evaluation was to present first semester (April to September) PEC and its two variants' results.

Main results are the following:

- 2 variants reached 100% for children growth monitoring, while PEC reached 50%
- For health committees participation PEC and AEC ONG reached 100%, while AEC PS reached 86%
- For DPT immunizations, PEC reached 63 %, AEC PS 60% and AEC ONG 54%; for SPR the figures were 57 % for AEC ONG, 30 % for AEC PS and 25% for PEC
- For AEC ONG, from April to September, coverage in weight control for children who grow well was between 76% and 93%, while AEC PS coverage, from June (start of this service) to September, was between 62.1% and 92.7 %. No information was available for PEC.
- For PEC, between 0.6% and 1.1 % of children were classified monthly with Pneumonia, for AEC ONG, figures were between 1.5 and 3 % monthly and for AEC PS between 1% and 2 % was found monthly
- For AEC ONG between 61.5 and 100% of pneumonia cases were treated with the appropriate antibiotic each month. The range for AEC PS was between 78.8% and 100% for the 5-month period. This information is not available for PEC
- For PEC between 0.6% and 1.5%, of children were classified with diarrhea monthly, for AEC ONG range was between 2.1% and 3% and for AEC PS, figures are between 0.2% and 4.4%
- From 100% to 57.4% of diarrhea cases with dehydration for the AEC ONG were treated with oral rehydration salts, showing a decrease for this tendency. The range for AEC PS was between 39.1% and 100% with an increase in the tendency; no data is available for PEC due to system's lack of data consolidation.
- For PEC between 5.9% and 7.6% of pregnant women had monthly antenatal care, for AEC ONG figures are between 0.5 and 2.5 monthly and for AEC PS, between 0.2% and 5.7%
- For PEC post natal control was between 5.5% and 6.8% monthly, AEC ONG range was between 2.8% and 5.5% and for AEC PS, figures are between 0.0% and 3.1%
- For AEC ONG, 220 new family planning users were provided services in 5 months, reaching 45 couple years protection (CYP); for AEC PS 102 new users were seen in 4 months, representing 22 CYP. Both

variants show increased tendencies; no data is available for PEC due to SIGSA system's lack of data consolidation.

The main conclusions of the evaluation were that the MSPAS's information system does not consolidate some data from the PEC, the reason why some indicators cannot be compared; the two variants' results are close to the Guatemalan Model's results in some cases, in others they exceed them; some differences in results for the two variants, compared with the model, can be explained due to services being in place only 6 months or less in the variants; much progress has been achieved in community organization and participation; for the costs study, an instrument and instructions manual for data entry have been designed (data will be available at the end of the research).

Limitations

The AEC-PS extension of coverage variant depends to significant degree on the Ministry's allotment of resources. Details of current problems follow:

- Lack of oral rehydration salts; reason why diarrheas are not treated appropriately
- MSPAS personnel was on strike during August and September and did not give information related to the health posts population census
- The MSPAS's information system does not consolidate certain Guatemalan Model data, leading to some indicators not being available for comparison; the needed information will be collected from the primary source (SIGSA 3 PS) in order to compare the data
- Counterpart financing for Operations Research is guaranteed only until September 2004

2.2. Result 2: Adoption of Health Practices within the Home which Favour Child Survival and Reproductive Health

- Increased capacity of the MSPAS and its partner NGOs to design, plan, implement and evaluate behavior change interventions
- Improved health practices in the home through behavioral change interventions

2.2.1. Summary of IEC/BCC Objectives and Strategies

Result 2 corresponds with the IEC/BCC sub-system, which lends support to all three major *Calidad en Salud* components, Family Planning (FP), Integrated Management of Childhood Illnesses (IMCI) and the combined Integrated Child, Maternal and Women's Care in the Community (AIEPI AINM-C) strategy with its two complementary components - integrated case management and health promotion and illness prevention. Result 2 has two major objectives, one at the MSPAS and partner NGO central level, and the other at the operative (Health Area, health services and community) level.

The first objective - to increase the capacity of the MSPAS to design, plan, implement and evaluate behavior change interventions - focuses on institutionalizing contemporary health behavior change communication (BCC) and interventions. Although some progress was made, this objective was not fully attained in 2003. Throughout 2003, the *Calidad en Salud*'s IEC/BCC team worked closely with two specific communication-related units in the Ministry of Health (MSPAS) - the Health Promotion and Education Department (PROEDUSA) and the Social Communication Unit, but neither took a leading role in IEC/BCC and there was limited coordination between them, despite specific *Calidad en Salud* interventions to promote their leadership. The IEC/BCC team continued to

coordinate activities and materials' development with individual programs of the MSPAS, namely, with the National Immunization Program (PNI), the National Reproductive Health Program (PNSR), the Food and Nutrition Security Program (PROSAN), the Integrated Child and Adolescent Health program (SINA) and with the Health Provision Unit 1 (UPS1), as well as with the National Technical and Operative Coordinators of AIEPI AINM-C. Unfortunately, the "Communication Council" with IEC representatives from all major MSPAS programs and units, initiated in 2001 and suspended in 2002 by the new Social Communication Unit Director, was never reactivated.

Through the inter-institutional and inter-agency group known as the GTI-IEC[1], the IEC/BCC team continued to provide technical assistance, administrative coordination and financial support for the development of IEC materials and the execution of IEC strategies for FP, IMC and AIEPI AINM-C. The GTI-IEC met regularly during 2003 and, in the last quarter, participated in a communication fair, highlighting strategies and materials on adolescents' sexual and reproductive health and a workshop for the development of an IEC/BCC strategy on this topic.

The second objective - improved health knowledge, attitudes and practices of women of reproductive age and mothers of children less than 5 years in the home through behavior change interventions, is being achieved through technical assistance to the MSPAS in the design and execution of three inter-related IEC/BCC strategies for FP, IMCI and AIEPI AINM-C. Through active participation and secretarial support to the GTI-IEC, *Calidad en Salud* is also influencing the programmatic focus of its member organizations, most of which are presently implementing the AIEPI AINM-C strategy. At the institutional level, the IEC/BCC strategies for FP, IMCI and the case management component of AIEPI AINM-C have focused on improving interpersonal and intercultural relations, as well as the communication and counseling (IPC/C) between providers and users in hospitals, health centers, health posts and community centers. These IEC/BCC strategies also support national campaigns periodically scheduled by the MSPAS and special events during international and national celebrations. The community promotion and prevention component of the AIEPI AINM-C strategy revolves around all six of the IEC/BCC tactics that have been developed under *Calidad en Salud'*s integrated communication strategy: 1) mass media (radio), 2) IPC/C between community providers and caregivers during both growth monitoring and promotion (GMP) sessions and home visits, 3) group communication during group and community sessions, 4) special campaigns designed and scheduled by the MSPAS, but requiring local adaptation, 5) educational entertainment during local events and festivities, and 6) community mobilization and participation. The IEC/BCC support system continues to be intimately linked to *Calidad en Salud*'s Result 4, which reports on community participation and the AIEPI AINM-C strategy. The IEC/BCC sub-strategies or tactics have been described in detail in manuals and previous reports.

Among the main achievements for the year 2003 was the active participation of the GTI-IEC in the pre-testing and printing of FP, IMCI and AIEPI AINM-C materials, discussion of male involvement in reproductive health, and in the adolescent sexual and reproductive health strategy workshop held in November.

Balanced counseling activities and materials were launched nationwide in 2003. One-hundred percent of approximately 6,000 providers involved in family planning counseling were trained in balanced counseling, following training of trainers. The training of trainers (TOT) manual was published and a didactic guide for balanced counseling training was developed, reproduced and distributed.

Progress was made throughout the year to overcome problems in the implementation of IEC/BCC for IMCI. The reproduction and distribution of key IEC IMCI materials was achieved, and interpersonal communication and counseling (IPC/C) improved during the last quarter in health centers participating in "collaborative teams" study.

In AIEPI AINM-C, the institutionalization of growth monitoring and promotion at the community level was accomplished, supported by the revised national norm reflecting the use of the minimum expected weight gain table, numerous job aids for community personnel and IEC materials for distribution to mothers. Production of all AIEPI AINM-C IEC materials for health promotion and illness prevention was completed and over 13,000 sets were distributed along with training. Authorization was obtained from the MSPAS to retrieve the *Vigilante* Notebooks - with anthropometric data for 2003- for computer entry and analysis.

[1] GTI-IEC members include the Social Communication Unit, and the Promotion and Health Education Department of the MSPAS, other MSPAS programs as needed, *Unidad Ejecutora*, ADEJUC/ Promasa, American Red Cross, APROFAM, CARE, Celsam, CRS, *Cruz Roja Guatemalteca*, HOPE, IGSS, JHPIEGO/ MNH, PAHO, PASMO, Population Council, *ProRedes Salud*, Save the Children, SHARE, UNICEF and *Calidad en Salud*.

Monitoring in 30 selected health facilities showed that most of them had all FP and IMCI materials. Analysis of the ENSMI 2002 results compared to those of 1998-99 showed that significantly more reproductive-age women had listened to or had seen messages about family planning in the past 12 months. Knowledge of specific methods – particularly, vasectomy - has also increased.

The IEC monitoring and supervision system was developed in 2003 and was tried out in the field, especially in Quetzaltenango. In addition, an instrument to summarize IEC/BCC activities by IEC Health Area Coordinators was proposed to the Director of SIAS, the Communication Unit, PROEDUSA and later to the General Health Information System (SIGSA). This form was made official in December 2003. This is the first time that SIGSA has an instrument for the IEC/BCC health services' support system.

IEC/BCC team members took part in international events in: a) Colombia to participate in a workshop on Gender and Sexual and Reproductive Rights, b) Nicaragua to take part in the Expert Consultation on IMCI, and c) Washington to attend a conference on men and reproductive health and present a poster summarizing the results of MSPAS/*Calidad en Salud*'s Growth Monitoring and Promotion Operations Research conducted in the Ixil triangle at the 5th International Conference on the Scientific Basis of Health Services.

Within IGSS, the IEC/BCC Section was established within the Communication Directorate of this institution.

2.2.2. General IEC/BCC Capacity Building

General

IEC/BCC institutionalization plans drafted in 2003 included: 1) assisting the Social Communication Unit to better define its role as leader and manager of IEC/BCC interventions, 2) encouraging both the Social Communication Unit and PROEDUSA to take a leadership role in a Communication Council and the GTI-IEC, 3) reviewing lines of communication, role and functions of the IEC Health Area Coordinators, and 4) including IEC/BCC activities in regular annual programming (POA) at the central level. Towards this end, meetings were held throughout 2003 together and independently with each unit and with the facilitation of the *Unidad Ejecutora*. However, a proposal to establish a Communication for Social and Behavioral Change Unit within the MSPAS that could breach the gap between a politicized Social Communication and Public Relations Unit (presently in charge of public relations) and PROEDUSA (mostly focusing on community organization and participation) proved impossible to attain. An important achievement, however, was having a representative of each, the Social Communication Unit and PROEDUSA, regularly participate in the GTI-IEC, but neither of them wanted nor felt it was relevant to exercise leadership in this group. Neither the Social Communication Unit nor PROEDUSA exercised IEC leadership within the MSPAS either. The formation of an IEC Council (akin to the GTI-IEC) with representatives from all the major MSPAS programs (normative) and operational units to focus on IEC/BCC issues was initiated in 2001, suspended in 2002, and never reactivated. The manual of functions of the IEC Health Area Coordinators was not released by PROEDUSA, nor did the Communication Unit make the printing/re-printing procedures for the integrated set of IEC/BCC materials produced with support from *Calidad en Salud* official.

Changes in personnel occurring in the MSPAS since the beginning of the project have greatly contributed to the difficulties related to the institutionalization of IEC/BCC. At the beginning of 2003, for the second time in the last three years, two new IEC/BCC counterparts were named, the director of the Social Communication Unit and the person responsible for IEC/BCC in the PNSR. The PNSR counterpart, however, was also in charge of the "responsible paternity" component of the PNSR and consequently found it difficult to devote time to IEC/BCC activities related to family planning and adolescents. In the last quarter of 2003, a graphic artist was hired as the new IEC/BCC counterpart in the PNSR. Additional orientation time has been required to review with each new counterpart the proposal to institutionalize IEC/BCC within the MSPAS, as well as IEC/BCC theoretical framework, strategic planning, strategies, sub-strategies, products, and the on-going production and distribution process.

During this year, PROEDUSA implemented a project (with Inter-American Development Bank –IDB- funds provided to the Health Services Improvement Program by UNDP) to train IEC Health Area Coordinators in a strategy known as "Municipalities for Development" (formerly "Municipalities for Health and Peace"). The

strategy precluded quarterly workshops previously scheduled with *Calidad en Salud* and required that the IEC Area and District Coordinators work exclusively with a newly legalized structure of Municipal Councils, Municipal Planning Offices (formerly, Municipal technical units), and Municipal Health Commissions. (Health is one of nine commissions within each municipality.) The *Calidad en Salud* IEC/BCC team had to find creative ways to work within this strategy and ultimately participated in workshops in all 26 Health Areas providing over 300 Health District – Municipality teams with an introduction to health communication. Training included IEC/BCC providing sample brief communication plans developed to address main health problems, and having Municipalities develop their own plans (40 plans were written during workshops and PROEDUSA presented them in their final report to the IDB).

Calidad en Salud's IEC/BCC team continued to schedule and participate in meetings with the MSPAS units and programs (PNI, PNSR, PROSAN, UPS1) to review FP and AIEPI AINM-C materials and obtain their approval before printing. All materials printed to date underwent numerous revisions by these programs and obtained final written approval by the Technical Coordinator of the AIEPI AINM-C strategy.

Monthly or more frequent meetings of the GTI-IEC continued this year. In November a workshop to develop the IEC/BCC strategy for adolescent sexual and reproductive health was held with technical assistance from a JHU-CCP consultant in the design and execution of the program. The Integrated Child and Adolescent Health Program (SINA), the PNSR, the HIV/AIDS program, the Ministry of Education, PAHO, a youth representative and 15 other GTI-IEC members attended the workshop. In the last quarter of 2003, in preparation for the workshop, the FP GTI-IEC sub-group devoted considerable time to a document review (IEC/BCC reports and statistics) on adolescents, and executed an inventory of existing training and IEC materials from AID-supported projects in several regions and from Guatemala. Also, the first communication fair of IEC/BCC strategies and materials on adolescents sexual and reproductive health took place in October 3, the National Youth Day, coinciding with the making official of the MSPAS/ SINA's policy for adolescents' health. In 2003, the four issues of the Actual newsletter were produced, one summarizing research conducted by the Population Council on male participation in reproductive health; one presenting evidence about the optimal 3-5 year intergenesic interval; and two issues on adolescent sexual and reproductive health.

Technical assistance continued to be provided to GTI-IEC members from JHPIEGO, The Population Council, APROVIME, and Save the Children. *Calidad en Salud* IEC/BCC component offered University students in Guatemala and abroad the opportunity to conduct supervised practices or thesis in topics of interest to the project, such as men's involvement in reproductive health and balanced family planning counseling leading to selection of IUD, with joint supervision of The Population Council and *Calidad en Salud*. A graphic arts student from Universidad Landívar was also involved in the development of the new child health card. The IEC/BCC advisor facilitated a six-month distance education course on Health Communication for 150 health and nutrition professionals from numerous institutions, organized by the Guatemalan Nutritionist Association (ANDEGUAT). As part of this course, the *Calidad en Salud* IEC/BCC conceptual framework, strategies, tactics and materials were presented and had high visibility.

The IEC/BCC component participated in the development of an advocacy strategy to present *Calidad en Salud* FP, IMCI and AIEPI AINM-C achievements over the past four years to the parties of the 2003 presidential candidates in order to have them consider these programmatic components and strategies in the development of their own health plans and quality improvement systems' approaches to health care. Presidential candidates were visited by *Calidad en Salud* and one of the candidate's teams visited the project on two occasions, once to discuss the IEC/BCC strategies and results and to learn more about limitations to IEC/BCC within the MSPAS. The IEC/BCC team contributed technical and editorial input to the production of a set of short "news bulletins" on project achievements and on several manuals produced this year. An article on AIEPI AINM-C was written and published by WHO's Scientific Committee on Nutrition (SCN) bulletin.

The IEC/BCC team members participated in three international events in 2003. An IEC/BCC technical assistant traveled to Colombia to participate in a workshop on Gender and Sexual and Reproductive Rights as a strategy to improve the quality of RH/FP services and increasing male participation in reproductive health, which has served as a basis for a GTI-IEC discussion of a strategy on this topic. The IEC/BCC advisor participated in an Expert Consultation on Community IMCI held in Nicaragua on February with a presentation on the alliance between the public and the private sectors for the expansion of community IMCI (AIEPI AINM-C) and an exhibition of AIEPI

AINM-C communication and training materials. Finally, the IEC/BCC advisor also traveled to Washington on September to attend a conference on men and reproductive health, present a poster summarizing the results of MSPAS/*Calidad en Salud*'s Growth Monitoring and Promotion Operations Research conducted in the Ixil triangle at the 5th International Conference on the Scientific Basis of Health Services; visit JHU-CCP, JHPIEGO, FHI, AED and other USAID contracting agencies to obtain information and materials related to male involvement in reproductive health and adolescent reproductive health; and update URC staff on *Calidad en Salud's* IEC/BCC activities.

Area and Community Level

Technical support to MSPAS Area-level staff responsible for health promotion and communications activities has taken three forms: 1) quarterly workshops with the 26 IEC Health Area Coordinators (mostly social workers), 2) quarterly workshops with eight IEC Area Coordinators in priority health areas (these eight social workers are also included among the 26) and *Calidad en Salud* first-level facilitators, and 3) direct technical assistance and monitoring/supervision visits to eight priority Health Area. During 2003, PROEDUSA was reluctant to schedule the quarterly workshops due to their concentration of efforts in the Municipality strategy. However, two of six workshops planned for all 26 IEC Area Coordinators were conducted on February and October, respectively, and two of four workshops of IEC Area Coordinators and *Calidad en Salud* fist-level facilitators in priority areas took place in March and September. *Calidad en Salud* provided financial and technical support for these workshops.

Achievements at the Health Area level include the monthly workshops that IEC Coordinators hold with the Area IEC team in the area -made up by those responsible for promotion in the Districts- in order to replicate workshops and review plans and progress in the implementation of IEC strategies for FP, AIEPI and AIEPI AINM-C. At their request, the *Calidad en Salud* IEC/BCC team participated in some of these meetings. Some of the IEC Area Coordinators have been successful in incorporating international and local NGOs working in the area into their IEC teams and are coordinating activities with hospital social workers, especially for the promotion of family planning, sterilization services in hospitals, and IUD insertion in health centers.

The IEC/BCC team actively participated in the monthly meetings of first-level *Calidad en Salud* facilitators to discuss IEC/BCC accomplishments and future plans, to identify problems and solutions, and to identify successful experiences and original ideas. Specific IEC/BCC technical assistance needs in priority areas were communicated through first-level facilitators. The IEC/BCC team has also participated in the monthly ATR (Regional Technical Advisers that focus on FP activities on non-priority health areas) meetings to provide them with common guidelines regarding the distribution and use of FP materials.

The emphasis during last quarter's meetings was on the institutionalization of the monitoring and supervision system for IEC/BCC interventions, including the introduction of a new form to collect summary information on IEC materials and activities at different levels that was approved by both, the Social Communication Unit and PROEDUSA, and officially incorporated in the General Health Information System (SIGSA). This is the first time that IEC Health Area, District, Health Post Coordinators have a form to collect and report, on a quarterly basis, IEC information to the MSPAS central level. The eight priority Areas began using this reporting form in the last quarter of 2003. Other activities with the IEC/BCC Area Coordinators included the pre-testing of the adolescent brochure, and the standard days method for family planning "user card".

Training related to the IEC sub-strategies, activities and materials carried out by the *Calidad en Salud* IEC/BCC team, the IEC Coordinators and the first-level facilitators in the Areas are included in Annex E. The first-level facilitators estimated that this year they spent about 60 percent of their time on AIEPI AINM-C training and 40 percent on other IEC/BCC activities.

2.2.3. Specific IEC/BCC Results for Family Planning

IEC/BCC Strategies for FP

Achievements will be presented under five main categories related to the development and implementation of the IEC/BCC Strategy for Family Planning.

- ***IEC/BCC Conceptual Framework***. Based on former experiences and research, *Calidad en Salud* has refined the application of the IEC/BCC framework in strategic planning and in the actual implementation of the strategies. This framework is now well known and has been adopted by counterparts in the MSPAS and NGOs at central and local levels, who presently consider the third phase in the framework –pre-testing of job aids and materials - indispensable.

- ***Inter-institutional Technical IEC/BCC Group***. Several international and local NGOs, external cooperation agencies which support IEC/BCC interventions in public health, and the MSPAS were incorporated into the GTI-IEC, formed in 2000. The group has met regularly since then and has actively participated in the design, pre-testing, and implementation of the national IEC/BCC strategy for family planning. The GTI-IEC has systematically analyzed reproductive health information and problems in the country. During the last quarter of 2003, the GTI-IEC focused its attention on the results of the new DHS survey (ENSMI 2002), especially data on men and youth. This group has also developed a viable approach to addressing one of the main problems in the design and implementation of IEC/BCC processes, namely, lack of inter-institutional coordination.

- ***Benchmarking***. This quality improvement methodology has been used extensively to identify the best IEC/BCC practices. The GTI-IEC has routinely reviewed experiences and materials on maternal and child health and reproductive health from other regions and countries, and, through the Actual newsletter, has contributing to a systematic dissemination of ideas. This process has led the group to become more professional and develop high quality strategies and materials. During the last quarter of 2003, the GTI-IEC used the benchmarking methodology to identify the best practices regarding IEC/BCC interventions on adolescent sexual and reproductive health (ASRH), as the basis for strategic planning related to this new topic. Led by SINA and the HIV/AIDS program of the MSPAS, the GTI-IEC invited all organizations carrying out activities in this area to participate in a "fair of IEC/BCC materials and activities on ASRH" that took place on October 3, the National Youth Day, together with making SINA and the national adolescent health policy official. In addition to the MSPAS programs, 15 organizations participated in the exhibit of materials. A youth theater group from San Marcos also performed.

- National IEC/BCC Reproductive Health Strategy with Emphasis on Family Planning. In July, 2000, all GTI-IEC member organizations came together for a week to develop the strategic IEC/BCC plan, which has guided the implementation process over the last three years, including: design and production of job aids and IEC materials, distribution of messages and materials, training on IEC/BCC strategy, sub-strategies, and materials' use, and monitoring of IEC/BCC activities. In 2003, two additional IEC/BCC strategies were developed by the GTI-IEC, one for involving men in a supportive role for reproductive health decisions and practices (prenatal care, neonatal and infant and child care, FP and HIV/AIDS prevention), and the other on adolescents' sexual and reproductive health. The latter was developed in Nov. with technical support form JHU-CCP and *CS*, and will start to be implemented in 2004.

- Central planning and local adaptation. Given that the National IEC/BCC Reproductive Health Strategy with emphasis on family planning was centrally designed, it was mandatory that it be adapted at the Area level. IEC Health Area coordinators participated in workshops to adapt sub-strategies to their local conditions and resources. Local area IEC/BCC plans have been prepared annually (in 2001, 2002 and 2003). In turn, Area Coordinators worked on plans with IEC/BCC District coordinators. The strategy has had mostly an institutional emphasis, however. Although efforts were made to promote local community implementation since 2001 (with promoters, traditional midwives and malaria collaborators), emphasis on the AIEPI AINM-C strategy made the project decide not to focus on community-level activities until AIEPI AINM-C had been made official and definitive and specific IEC materials for *Vigilantes* and other members of the basic health team of the Extension of Coverage were available.

IEC/BCC Materials for FP

Since Sept 2001, an impressive number of different IEC/BCC family planning provider job aids and materials for primary audiences have been designed, pre-tested, produced and distributed (see Table 19). The pre-testing of materials by Area staff and the GTI-IEC has guaranteed that they be legible, comprehensible, attractive, persuasive and memorable. In addition, drawings and text are culturally appropriate and adapted to low-literacy audiences. Involving various MSPAS programs and diverse organization in the design process, and in the technical review, field testing, ensuing modifications and final production has been rewarding and successful, as well as time-consuming.

Materials produced and distributed in 2003 include: a balanced counseling algorithm developed on the basis of the FRONTIERS/ Population Council algorithm and a set of 10 companion cards; a flipchart for FP counseling, whose final printing was delayed in order to include the algorithm; IUD flyers that have been used to promote "IUD Insertion Days" in health centers; two situational room posters one on methods and the other on new users; a FP "Ask me" button for providers; and 10 radio spots with testimonials.

Family planning methods brochures and posters were reprinted by both *Calidad en Salud* and *Unidad Ejecutora*, and half of them have been distributed so that health services have enough at the start of 2004. Good coordination with GTI-IEC member organizations has led several of them to print FP materials together with *Calidad en Salud*.

Table 20 - IEC/BCC FP materials produced in 2001-02 and in 2003

Material	Produced in 2001-2002	Produced in 2003	Total
All-methods brochure	500,000*	560,000	1,560,000
Individual methods brochures (10 Maya and 10 ladino)	2,000,000	4,000,000	6,000,000
All-methods poster	5,000*	5,000	10,000
ACCEDA poster	5,000*		5,000
Male sterilization 50-unit pads	5,000*	5,000	10,000
Female sterilization 50-unit pads	5,000	10,000	15,000
FP laminated brochures	2,500	11,500	14,000
FP flipchart		5,800	5,800
Balanced counseling algorithm plus cards		6,000**	6,000
"Ask me about FP" buttons		14,000 (distributed)	14,000
IUD flyers (Maya and ladino versions)		250,000	250,000
FP situational poster – methods		4,000	4,000
FP situational poster – new users		4,000	4,000
Radio spots (10 RH spots)	405		405
Radio spots (10 FP spots)		3,200	3,200

* printed with *Unidad Ejecutora*/ MSPAS funds ** printed with Population Council funds

This last quarter, a brochure on sexual abstinence, drafted by *Calidad en Salud*, was pre-tested with two groups of adolescents at the fair, and by several Area Coordinators and GTI-IEC member organizations (Save the Children and HOPE). The prenatal brochure was finalized after pre-testing, but funds are pending for its printing. One of three FP mini-videos has been finalized and will be reproduced for distribution in January 2004. Finally, in coordination

with the FP component of the project, a poster with a protracted FP balanced-counseling algorithm and a brochure "All about IUD" dealing with how it works, advantages, disadvantages, secondary effects, and answers to common rumors and misinformation have been drafted. The latter responds to one of the needs of the strategy to re-launch this method.

IEC/BCC Training for FP

Following initial TOT of 64 Area facilitators, one-hundred percent (6,000) health personnel in-charge of FP counseling in services has been trained in balanced counseling (see Annex C). In addition, all IEC/BCC Area and District Coordinators have been trained on counseling and its monitoring and supervision. Both the FP IPC/counseling TOT manual and the balanced counseling didactic guide were produced and distributed this year, the former in a formal version with a companion CD with worksheets and overheads, and the latter in a photocopied version.

IEC/BCC Monitoring and Evaluation for FP

One round of monitoring was carried out directly by the IEC/BCC team in together with Area Coordinators and 1st-level IEC facilitators. The results below were presented in this year's third quarterly report. These indicate that most health centers and health posts in the sample had all the FP brochures and posters for increasing demand and appropriate counseling. The postpartum, necklace and ovulation brochures were not available in half of the health centers and posts visited. The reason for this shortage is that less of these brochures were printed to begin with. However, it is expected that with the additional brochures printed at the end of this year the problem will be solved.

Table 21 – Percentage of health facilities that had printed IEC FP materials (at least one)

Printed material	C/S n=4	P/S n=26	Total N=30
All methods brochure	100 (4)	96 (25)	97 (29)
Postpartum brochure	50 (2)	42 (11)	43 (13)
Pill brochure	100 (4)	85 (22)	87 (26)
Injection brochure	100 (4)	92 (24)	93 (28)
LAM brochure	100 (4)	81 (21)	83 (25)
IUD brochure	100 (4)	85 (22)	87 (26)
Condom brochure	100 (4)	88 (23)	90 (27)
Necklace (SDM) brochure	50 (2)	57 (15)	57 (17)
Ovulation brochure	50 (2)	61 (16)	60 (18)
Women's sterilization brochure	100 (4)	92 (24)	93 (28)
Men's sterilization brochure	100 (4)	85 (22)	87 (26)
All methods poster	100 (4)	81 (21)	83 (25)
ACCEDA poster	100 (4)	77 (20)	80 (24)

According to data from the last two DHS surveys in Guatemala (ENSMI 1998/99 and ENSMI 2002), the total contraceptive prevalence rate increased from 38 percent in 1999 to 43 percent in 2002; moreover, when data are presented by ethnic group and residence, the contraceptive rate increased from 12.6 percent to 23.8 percent in Mayan population and from 27.7 percent to 34.7 percent in population in rural areas. Undoubtedly, the IEC/BCC intervention carried out during the same period of time has contributed to these increases. Tables 22, 23, 24 below compare ENSMI 1998/99 and ENSMI 2002 data on increased exposure to FP messages of reproductive-age women living in union. Statistically significant differences between surveys were found for the North Western region of the country, which includes two priority areas (Quiché and Huehuetenango) and for the Mayan population, who lives predominantly in priority areas. Results by education are mixed, while women with high-school education reported having heard FP radio messages more than women without or with only primary education, women with no education reported having seen printed materials more than women with primary or high-school education. A statistically significant increase was also found in the number of women who reported having seen a FP poster in 1998/99 compared to 2002 and by all characteristics analyzed (table not presented).

Table 22 - Percentages of women who have been exposed to a message through mass media in the last 12 months, by selected characteristics

Selected characteristics	ENSMI 1998/99	ENSMI 2002
North-Western residence (Quiché and Huehuetenango)	26.3	47.7*
Mayan ethnic group	29.4	46.9*

* t-test, p<.001

Table 23 - Percentages of women who have listened to a FP message on the radio in the last 12 months, by selected characteristics

Selected characteristics	ENSMI 1998/99	ENSMI 2002
North-Western residence (Quiché and Huehuetenango)	24.0	33.9*
Mayan ethnic group	27.0	34.2*
Secondary education or more	54.1	62.4*

* t-test, p<.001

Table 24 - Percentages of women who have seen a FP message on printed media in the last 12 months, by selected characteristics

Selected characteristics	ENSMI 1998/99	ENSMI 2002
North-Western residence (Quiché and Huehuetenango)	15.6	24.4*
Mayan ethnic group	14.7	24.6*
No education	12.7	18.8*

* t-test, p<.001

Other positive results include the increase in the percentage of women who know about specific family planning methods, namely, the pill, the injection, the condom, and female and male sterilization. Knowledge about vasectomy showed the largest increase from 54 percent in 1999 to 83 percent in 2002, a statistically significant difference; given that knowledge can be and antecedent to practice, this increase suggests that vasectomy should now be subject to more active promotion because its adoption curve is ready to rise. As mentioned, the percentage of women who reported having heard a FP message in a community group did not increase, which suggests that community activities, in general, or those in which family planning is addressed have not had large coverage.

However, it should be taken into account that up until April 2002, when AIEPI AINM-C was made official, family planning had not been included in the basic health package of the Coverage Extension model. It is expected that with the training of health *Vigilantes* in the third module of AIEPI AINM-C (maternal neonatal health and family planning) this quarter, exposure to messages in community settings will increase.

Behavior and Product Trial of the Standard Days Method™ Card

Although all the FP methods included in training and portrayed in IEC materials are supposed to be offered by health services, in reality the "necklace" method (Standard Days Method) has been offered very little due to insufficient quantities of the cycle beads. Following the re-launching of this method by an NGO in the third quarter of 2003, 15,000 necklaces were to be distributed nationwide, a small quantity considering that a large number of women might be interested in the method, both as an educational tool and as a natural family planning method. Therefore, the Institute for Reproductive Health of Georgetown University signed a contract with *Calidad en Salud* to conduct a field test of a Standard Days Method card to be used by women *in lieu* of the cycle beads or necklace.

The IEC/BCC team modified the original proposal to characterize it as a "pre-test", "trial of improved practices" and "product trial". Five data collection instruments were prepared: a focus group guide for reproductive age women; initial, intermediate and final interview questionnaires for users; and a focus group guide for health providers. The research has been carried out during the last quarter of 2003 and a final report will be ready in January 2004. Preliminary results indicate that eligible women are capable of using the SDM card and that its use is facilitated when women know how to read and write, but even motivated illiterate women can read numbers and either they or their husbands can mark the card. A new card based on the product trial has been designed and proposed to the Institute for Reproductive Health of Georgetown University. The potential to use this tool in fertility awareness activities with adolescents is being explored.

2.2.4. Specific IEC/BCC Results for IMCI

IEC/BCC Strategies for IMCI

Since 2000, the involvement of IEC/BCC component in IMCI has focused more on supporting campaigns during National Health Weeks and other events (e.g. Lactation Week), as well as mass media (radio), and less on IPC/counseling. The reasons for this are worth summarizing:

a. Unlike family planning and AIEPI AINM-C's growth promotion and prevention, which have a preventive focus, IMCI deals with management of illness, which falls mainly in the domain of health providers (physicians and nurses).

b. Social workers and Rural Health Technicians (TSRs) mostly responsible for IEC/BCC activities in Health Districts do not provide direct health care and, thus, their training and involvement in IMCI is usually not considered necessary or relevant.

c. In the hierarchical organization of the MSPAS, physicians hold the higher positions, and social workers, who hold the lower, feel intimidated. To compound this situation, social workers in the MSPAS do not receive specialized training in public health and spend many years learning by observation about MSPAS structure, programs and public health indicators. This is somewhat the case at central level, where IEC/BCC-related personnel are anthropologists, psychologists, communicators and other social scientists, generally without training in public health.

d. Even though one of the sub-strategies of the IEC/BCC IMCI strategy is strengthening interpersonal communication and counseling by health providers, the IEC/BCC social workers and other personnel have found it difficult to train physicians and nurses in these topics and, more so, to monitor their performance in IMCI counseling.

Progress to overcome problems was slowly made during 2003. At the beginning of the year, the IEC Area Coordinators and 1st level facilitators in priority areas reviewed the results of IMCI monitoring, which showed that availability and use of IEC materials and counseling were among the lowest indicators. In August this year, IEC Area Coordinators and *Calidad en Salud* 1st level facilitators in priority areas also received abbreviated training in IMCI and were very satisfied with the expanded understanding it provided of their potential role in the strategy. Also, *Unidad Ejecutora* printed additional quantities of materials to improve their availability in clinics and IEC Area Coordinators and 1st level facilitators, following a specific didactic guide, conducted refresher training in IMCI IPC/counseling and the use of materials by health providers.

During the last quarter of 2003, the IEC/BCC monitoring instrument that uses direct observation of IPC/counseling in health services was presented to the Area facilitators and, subsequently, adopted by the collaborative teams to obtain data on counseling indicators (see Result 1). Also, growth classification criteria –with the minimum gain table, used in the growth promotion component of AIEPI AINM-C were incorporated in the IMCI procedures manual.

IEC/BCC Materials for IMCI

The table below presents a summary of materials produced/ distributed in 2001-02 and 2003. Included in this table are large quantities of materials printed in 2003 by the *Unidad Ejecutora* with counterpart funds. An IMCI video for providers is currently under production. The minimum weight gain table and the process of classifying children's growth was included in the IMCI procedures manual.

Table 25 - IEC/BCC IMCI materials produced in 2001-02 and in 2003

Material	Produced in 2001-2002	Produced in 2003	Total
Recall leaflet for mothers/ caretakers		100,000	
	50,000	1,500,000*	1,650,000
Young child feeding guide	50,000	300,000*	350,000
Vaccination guide		50,000	
	50,000	300,000*	400,000
Young child feeding poster		5,000	
		2,500*	7,500
Danger signs poster		5,000	
		2,500*	7,500
Radio Spots – young child feeding (10)		2,000	2,000
Radio Spots- vaccination (10)		2,000	2,000

* printed by *Unidad Ejecutora*

Regarding other IMCI job-aids and training materials, the IEC/BCC component has noticed that the procedures manual is not very user-friendly and its design could be much improved. In addition, the *Aconsejar* manual, which was modified with IEC/BCC input at the beginning of the project, could also be improved following experiences in IPC/counseling and monitoring.

IEC/BCC Training for IMCI

As mentioned, IEC Area Coordinators and 1st level facilitators were trained in IMCI this year. Refresher training of health providers in IPC/BCC by 1st level facilitators has been summarized and presented in Annex C. This quarter, IEC Area Coordinators, *Calidad en Salud* Area and 1st level facilitators were trained in monitoring IMCI counseling through direct observation.

It is expected that, now that the Guatemalan minimum weight gain table was included in the IMCI procedures manual, health providers will be trained in the change from the nutritional status to the growth velocity paradigm, the new growth monitoring norms, and the information system.

IEC/BCC Monitoring and Evaluation for IMCI

The following results were presented in this year's third quarterly report. Considering that the one key material for improving the thoroughness of counseling and maternal recall and compliance is the take-home recall leaflet, the situation has improved dramatically since 2002. Unfortunately, health posts still lag behind health centers in terms of the availability of IEC IMCI materials, as highlighted in the following table.

Table 26 - Percentages of health facilities that had IEC IMCI printed materials in 2002 and 2003

Materials	2002	2003		
	Health services	C/S n=4	P/S n=26	Total N=30
Recall leaflet for mothers/ caretakers	21	100 (4)	77 (20)	80 (24)
Young child feeding guide	3	100 (4)	77 (20)	80 (24)
Vaccination guide	3	100 (4)	85 (22)	87 (26)
Young child feeding poster	0	50 (2)	38 (10)	40 (12)
Danger signs poster	0	50 (2)	35 (9)	37 (11)

Results of 30 direct observations of counseling in 10 of 17 health centers participating in the collaborative teams study indicate that performance is low. All indicators observed were below 80 percent; counseling on antibiotics (or another medicine when appropriate) and on danger signs that should trigger prompt consultation were higher than the rest. Despite the presence of support materials in facilities, their use of was found to be low. In less than half of the observations, the provider asked about the mother or caretaker's health, which precludes the opportunity to systematically offer family planning. Counseling within health centers in collaborative teams probably reflects the situation in other health centers because counseling has not been specifically reinforced in the study's services. Observations will be made in the rest of the participant health centers and the data will serve as baseline for the intervention to improve counseling skills (see Result 1).

Table 26 Percentages of observations showing adequate counseling on key topics

Indicator	Percentage (N=30)
Adequate* counseling on antibiotics for pneumonia (medicine**)	67 (20)
Adequate" counseling on ORS for diarrhea (liquids**)	40 (12)
Adequate* counseling on breastfeeding and complementary feeding	43 (13)
Adequate* counseling on danger signs that indicate when to come back to health service	63 (19)
Provider uses counseling material	23 (7)
Provider gives take-home leaflet	27 (8)
Provider asks about health of mother or caretaker	43 (13)

*Counseling was considered adequate if steps of explaining and verifying comprehension of mother were carried out. Demonstration of behaviors is another step in adequate counseling, but was not considered this time.

** The check list used did not specify antibiotics or ORS as it was agreed upon later.

2.2.5. Specific IEC Results for AIEPI AINM-C

IEC/BCC Strategies for AIEPI AINM-C

The main achievements are presented below, highlighting key elements in the process to implement the AIEPI AINM-C strategy, particularly the health promotion and illness prevention component.

Support programmatic component. IEC/BCC interventions have greater impact when they are supported by programmatic components. The initial attempt in 2001 to implement three national IEC/BCC strategies (integrated for FP, IMCI and maternal and neonatal health) and activities at the community level, devoid of a specific programmatic component or strategy, proved difficult. When the AEIPI AINM-C strategy was formulated in 2002 and the decision was made to implement it where the Extension of Coverage model is operating, IEC activities and materials were designed and distributed according to the different actors and their functions. Several of the national norms established by the Extension of Coverage model were changed to accommodate the AIEPI AINM-C. Notably, health *Vigilantes* now carry out growth monitoring and promotion in their community sectors (made up of 20 households each); whereas in the past institutional facilitators theoretically carried out growth monitoring. Family planning, which had not been included in the original basic package of Extension of Coverage services is now included, but it still needs to become an integral part of the counseling provided by all members of the basic health care team.

Benchmarking. This process continued to be used to identify best practices and lessons learned in IEC/BCC strategies and community participation methodologies.

Formative and operations research. The Ministry of Health, with support from *Calidad en Salud*, designed and carried out recipe trials and trials of improved practices in 2001. Formative research results subsequently helped to define the contents of young child feeding counseling under the AIEPI AINM-C strategy and the new infant and young child feeding guidelines made official by PROSAN in 2003. Under the AIEPI AINM-C strategy, the national policy shifted from focusing on nutritional status indicators such as low weight-for-age (reflecting total past of the child), to an indicator sensitive to recent changes in the child's health and nutrition, such as monthly weight gain. This initially generated strong opposition from the Guatemalan nutrition community, but in 2002 the MSPAS and *Calidad en Salud* conducted operations research on growth monitoring in the area of the Ixil Triangle, which

demonstrated its appropriateness and acceptability. Based on the Ixil Triangle research, where aids and educational materials for use by community health workers, were pre-tested, most of AIEPI AINM-C materials were produced in 2003.

***Systems approach*.** A systems approach in the design of the AIEPI AINM-C strategy and the IEC/BCC component allowed for the consideration of all major subsystems necessary for its successful implementation. IEC/BCC is only one of the systems, which includes training, logistics, information, monitoring and supervision, evaluation and administrative and financial, as well. A systems approach is a demanding job that required IEC/BCC to work collaboratively with all the other sub-systems.

***Alliances*.** From the beginning AIEPI AINM-C has generated and depended upon strong alliances between both the public and the private sector. The MSPAS launched AIEPI AINM-C with the support of many international cooperating agencies, NGOs and the donor community in 10 of the 26 Health Areas. Regarding IEC/BCC, through the AIEPI AINM-C sub-group of the GTI-IEC relevant programmes from the MSPAS and all major NGOs have participated in the process of designing, testing and producing these strategies and materials. This intergovernmental and interagency collaboration, however, has also taken a considerable amount of time to achieve, and consensus has not always been easy to arrive at, particularly regarding integrated case management materials due to some of the same factors detailed under IMCI.

The anticipated nationwide expansion of AIEPI AINM-C will depend on the newly elected Guatemalan Government embracing the strategy, and discerning its merits over other malnutrition prevention strategies presently being proposed. The continuing coordination of financial and technical support of a broad spectrum of international NGOs and donor agencies will also be critical to the nationwide expansion of the strategy.

IEC/BCC Materials for AIEPI AINM-C

As can be observed in the tables below, practically all of the materials supporting the growth promotion and illness prevention component of AIEPI AINM-C strategy were produced and distributed in 2003. Due to the considerable amount of time required to produce them and their cost, the IEC/BCC team was not able to finalize the *Vigilante* Manual as anticipated. The printing by the *Unidad Ejecutora* of all AIEPI AINM-C materials for new *Vigilantes* (presently being negotiated) would allow the production of the *Vigilante* Manual in 2004 . The *vigilante* notebook for 2004 has been prepared –taking into consideration modifications observed in the field or suggested by the *Vigilantes* themselves- and 15,000 will be printed by the *Unidad Ejecutora*.

Table 27 - Summary of IEC materials for AIEPI AINM-C Promotion and Prevention component produced/ distributed year 2001-02 and 2003

Material	Produced in 2001-2002	Produced in 2003	Total
Set of counseling cards 1 (growth promotion)	2,500	13,000	15,500
Set of counseling cards 2 (illness treatment and prevention)	2,500	13,000	15,500
Set of counseling cards 3 (maternal and neonatal health)	2,500	13,000	15,500
Recall leaflets (Advice for the Family) 50 tear-out sheet pads (9 different pads)	9,000	3,170,00*	9,000
Referral and counter-referral forms 50 tear-out sheet pads	1,000	50,000 500,000*	51,000 551,000
Child Card	5,000	250,000 500,000*	755,000
Bags for each community health worker		14,000 (distributed)	14,000
Vigilante Notebook		13,000	13,000
Towels		14,000	14,000
Pens		14,000	14,000
Triangles		14,000	14,000
Clip boards		14,000	14,000
Buttons		14,000	14,000
Weight-for-age graph Poster and markers		1,500	1,500
Summary growth monitoring Poster and markers		1,500	1,500

* printed by *Unidad Ejecutora*

There has been a considerable delay in the production of IEC materials for the AIEPI AINM-C integrated case management component due to the extensive revision process by many actors (National Technical Coordinator of the AIEPI AINM-C strategy, UPS1, *Unidad Ejecutora*, PNSR, PROSAN, PNI). Also, as mentioned, integrated case management is principally curative and it has been difficult to structure family planning and prenatal care (which have a preventive focus and rely heavily on adequate counseling) within the IMCI steps of 1) ask/ observe, 2) classify, 3) treat and 4) counsel. However, the flipcharts have been printed and it is expected that the protocols and register sheets will be printed in January 2004. The table below summarizes materials for the integrated case management component of AIEPI AINM-C produced or in process.

Table 28 - Status of Integrated Case Management AIEPI AINM-C materials

Material	Produced in 2001-2002	Produced in 2003	Total
Childhood flipchart	450 (cards)	5,000	5,550
Women's flipchart	450 (cards)	5,000	5,550
Childhood protocol		1,600	In press
Women's protocol		1,600	In process
Childhood Register sheet		6,000 (offset)	In process
Women's Register sheet			In process

Training for AIEPI AINM-C

The IEC/BCC team participated in central and area level training in AIEPI AINM-C and in training conducted for NGO and Health Area Institutional Facilitators, NGO personnel in CARE, CRS, Mercy Corps, PCI, Plan International, Share, and 28 rural health technician (TSR) students who carried out their field practice in Chimaltenango. The focus was on growth monitoring and promotion procedures. (For a summary of training conducted in AIEPI AINM-C and community participation methodology in year 2003 refer to Result 4.) The IEC/BCC component has provided more direct technical assistance and supervision to the community participation component of the project since July 2003. IEC/BCC has emphasized community participation within AIEPI AINM-C including the participation of *Vigilantes* and mothers with children under two in GMP sessions, the analysis of growth monitoring data at the sector and community levels and the development of local plans to improve growth of small children.

IEC/BCC Monitoring and Evaluation for AIEPI AINM-C

The IEC/BCC Advisor also acts as Coordinator of the Promotion and Prevention component of AIEPI AINM-C. Therefore, since the beginning of the implementation phase, the IEC/BCC component participated in monitoring training workshops, especially regarding growth monitoring and promotion procedures, the use of counseling materials, and the use of GMP summary forms. When health *Vigilantes* started to conduct growth monitoring and promotion sessions in the community, the IEC/BCC component participated in monitoring those sessions with instruments that had been developed for the Ixil operations research. Using some of the same checklists, the AIEPI AINM-C and the IEC/BCC teams have continued to observe and provide feedback in GMP sessions conducted by *Vigilantes*. Also, the TSR students doing their supervised practice in Chimaltenango used these instruments to monitor *Vigilantes*' performance. More recently, the IEC/BCC component actively participated in the establishment of input, process and results indicators for AIEPI AINM-C and compared them to the monitoring and supervision instruments so as to ensure that information collected with the instruments serves to calculate the indicators. This quarter, the IEC/BCC component designed a protocol for field-testing AIEPI AINM-C monitoring and supervision instruments, which was carried out at the beginning of December by other team members.

As part of monitoring instruments, a summary form to consolidate growth-monitoring data at the community level was developed. This summary is key for proper utilization of the community GMP poster in the situational room. Also, another summary form to consolidate growth-monitoring data for all communities under a Community Facilitator can lead to the selection of "at risk" communities (those with 34 percent of more of children under 2 years not growing well). This is an interesting innovation to AIN and should be subject to careful analysis and evaluation. Consequently, the IEC/BCC component suggested that the *Vigilantes*' notebook (where weights are recorded) be collected at the end of 2003 or beginning of 2004 to have the data entered for computer analysis. This idea has been supported by PROSAN and UPS1. At that time, the *Vigilantes* will be given their 2004 notebook, which is now in press. (See additional discussion of AIEPI AINM-C activities under Result 4.)

The table below shows the percentage of community centers that have IEC materials for AIEPI AINM-C according to a convenience sample of interviews with providers. While the counseling materials were reported to be generally available, the take-home recall leaflet for mothers of sick children, which is key to improve maternal recall and compliance, was not. Observation data will be collected next year, together with facilitating supervision.

Table 29 - Percentage of Community Centers that reported having AIEPI AINM-C integrated case management materials (convenience sample, based on interviews)

Printed materials	Community Centers (N=160)
Recall leaflet for mothers/ caretakers	31 (50)
Counseling cards or flipcharts	88 (140)
Referral and counter-referal leaflet	53 (84)
All-methods brochure	58 (92)
Individual methods brochures	57 (91)
Child card	59 (95)

Follow-up Survey on the 2001 Base Line

The IEC/BCC follow-up KPC (knowledge, practices and coverage) rapid survey was conducted in the last quarter of 2003, two years after the baseline survey was conducted and the IEC/BCC FP strategy and materials were launched. The sample for the new survey was drawn in exactly the same manner as the sample in the previous survey (cluster sampling representative of the eight priority health areas). The same questionnaire used in the first survey was used, with a few additional questions on specific IEC activities and materials. The data are being entered for computer analysis at the time of this report and the final report will be ready in January 2004.

2.2.6. Specific IEC/BCC Results for IGSS

A major achievement during 2003 was that the IEC/BCC process was formally institutionalized in IGSS, where, in January, an IEC/BCC Health Communication Section was established within the Communications Directorate of this institution. Since the beginning of the project, but more intensively after the IEC/BCC Section was created, training and technical assistance was provided to the new Chief of the Section and her staff in the form of workshops on the IEC/BCC framework, on how to develop strategic communication plans, and how to conduct pre-testing of materials. These workshops were replicated at the area level in Escuintla where an IEC/BCC AIEPI AINM-C team was formed.

After tutoring and monitoring revealed that only 75 percent of IGSS maternal-and-child health services had IEC IMCI materials there was a renewed effort to stock them. This was accomplished but at the moment the clinics have used up these materials and are again in short supply. Although there are materials in the warehouse, they have not been distributed. The fact that the Head of the Maternal and Child Health Section – and not the IEC/BCC Section, is in charge of the processes of authorization of reprinting and distribution of materials in IGSS accounts for the lack of timely response. For a brief period of time during the third quarter of 2003 the Chief of the IEC/BCC Section was made responsible for printing and distribution (as it should be); however, this decision was reversed during the last quarter when new authorities were again appointed at IGSS. New authorities will exercise their posts for only 90 days.

As can be seen in the table below, very few of the IEC FP materials were reprinted in 2003 (because very few were distributed in the first place). The necklace (SDM) brochure was adapted for IGSS and 5,000 were produced and

distributed. The poster dealing with FP after an obstetric event, though pre-tested and finalized, has not been authorized for printing yet. Printing of materials that had been adapted and pre-tested for factories (all-methods poster, all-methods brochure, and danger signs in children poster) was halted following the events recounted above. In fact, the behavior change intervention specifically developed for factories by IEC/BCC at IGSS, with technical assistance from *Calidad en Salud*, has been postponed indefinitely.

Table 30 - Summary of IEC FP materials for IGSS produced and distributed in 2001-02 and 2003

FP Material	Produced in 2001-2002	Produced in 2003	Total
All-methods poster	1,000		1,000
Postpartum methods poster	1,000		1,000
All-methods brochure	150,000		150,000
Individual methods brochures	210,000	5,000 (SDM)	215,000
Laminated brochures	5,500		5,500
FP services video	150		150
Radio spots	40		40
FP user cards	20,000	20,000	40,000
Signals	37		37
Plastic boxes	13		13
FP Norms Manual		1,000	1,000
IGSS Bulletin on Quality of Health Care		500	500
Vaccination scheme posters		59	59
Binders with IEC/BCC strategies for FP and IMCI		13	13

No IEC IMCI materials for IGSS were reprinted in 2003; only the IGSS version of the IMCI procedures manual was printed (l,000) and distributed. A leaflet on the prevention of malnutrition and anemia is ready for printing. A medicines recall take-home leaflet for mothers and care-takers is currently being pre-tested. The table below shows the IMCI materials that have been produced to date for IGSS.

Table 31 - Summary of IEC IMCI materials for IGSS produced and distributed in 2001-02 and 2003

IMCI Material	Produced in 2001-2002	Produced in 2003	Total
Danger signs poster	600		600
Vaccination brochures	40,000		38,000
Diarrhea treatment and prevention brochure	100,000		100,000
ARI treatment and prevention brochure	100,00		100,00
Dengue and malaria treatment and prevention brochure	50,000		50,000
IMCI Procedures Manual		1,000	1,000

In addition, for the AIEPI AINM-C strategy at IGSS, the child and women algorithms, which are provider job aids, were pre-tested, revised and finalized as well as the following materials for primary audiences:

- an infant and child feeding guide
- leaflet on pregnancy care
- leaflet on postpartum care
- leaflet on breastfeeding and milk extraction for working mothers

Finally a FP educators' manual, to be used by health educators and extension promoters in community IEC activities, was pre-tested and is now ready to be printed.

Other IEC/BCC achievements related IGSS are discussed under Result 5.

Limitations for IEC/BCC

Despite the many achievements reported for 2003, the following constraints were identified:

- The institutionalization of IEC/BCC in the MSPAS was not achieved, as anticipated during this year. Although during the second half of 2003 both the Social Communication Unit and PROEDUSA's representatives attended all GTI-IEC meetings, they still are not committed to inter-agency and inter-sector coordination or to providing leadership to the process. The Social Communication Unit director has stated that the GTI-IEC is only part of *Calidad en Salud*'s agenda, while PROEDUSA has focused entirely on a project dealing with "Municipalities for Development" strategy, and feels that *Calidad en Salud* focus on IEC/BCC and "only select programs" (namely, matemal and child health and reproductive health) is limiting.
- Despite the fact that annual planning of all six workshops scheduled to be held in 2003 with 26 IEC Area Coordinator was accomplished, only two of these were authorized due to PROEDUSA's training of IEC Coordinators in the "Municipalities for Development" strategy. The planned workshops included a topic on RH/F and AIEPI (breastfeeding, complementary feeding and vaccination), an IEC/BCC technical issue, a quality issue, and IEC Area news.
- The fact that the MSPAS does not feel ownership of the GTI-IEC's mission, objectives and activities was evident in two instances of materials' production processes that were carried out in 2003 without taking this

group into account: 1) PROSAN's infant and child feeding brochures (based on an original idea by IEC/BCC *Calidad en Salud*) were finalized, printed and distributed without involving the GTI-IEC or *Calidad en Salud*, and 2) Plan International IMCI manual, midwife flipchart, and four manuals for training of traditional midwives, which did not acknowledge the use of diagramming concepts, content, and original artwork from *Calidad en Salud* and the GTI-IEC, were developed and produced with the AIEPI AINM-C Technical Coordinator's authorization, without the knowledge of the GTI-IEC or *Calidad en Salud*.

- In retrospect, the project's decision not to focus on FP community-level activities until AIEPI AINM-C had been made official and definitive and specific IEC materials for *Vigilantes* and other members of the basic health team of the Extension of Coverage were available, although justifiable, should have been subject to more analysis. Efforts to promote local community implementation since 2001 (with promoters, traditional midwives and malaria collaborators) should have continued in 2002 simultaneously with the development of the AIEPI AINM-C strategy and materials. As a result of this limitation, the FP IEC/BCC strategy has had a predominantly institutional emphasis, as shown in the DHS data.

- Production of most materials, but particularly the AIEPI AINM-C integrated case management protocols, has suffered considerable delays. Involving several programs from the MSPAS (in this case, all programs integrated in IMCI and the PNSR), UPS1 (with whom reaching consensus has been particularly difficult), and NGOs in the process of designing, testing and producing materials has contributed to the delays in the final production.

- The distribution of IEC AIEPI AINM-C materials (counseling cards, recall leaflets, referral leaflet, child cards and *Vigilantes* notebook) was a difficult process. The lack of personnel specifically devoted to carrying out the tasks of counting, packaging and transporting materials was a constraint. External hired help was helpful, but insufficient considering the large quantities of materials distributed. In addition, the information coming in from Health Areas regarding number of personnel and training dates was not always accurate or on time, which precluded having final distribution lists.

- A constraint in AIEPI AINM-C is the lack of follow-up of VS by the Institutional Facilitators (FI) and Community Facilitators (FC). In addition, some FCs have not received all their salaries and some VS have not received compensation for the trainings that they have participated in. This has negatively affected their motivation and has caused some of them (we do not have an estimate) to resign or stop conducting GMP.

- There is insufficient official information/communication to the NGOs working within the Extension of Coverage Process regarding strategies, changes in norms, information system and registration forms, etc. The communication within the MSPAS and between the MSPAS and its partner NGOs needs to be strengthened and standardized; a regular communication material (bulletin, for example) would support inter-institutional communication.

An advocacy and public relations strategy for FP, IMCI and AIEPI AINM-C has not been fully developed and implemented by *Calidad en Salud*. This has been due mainly to personnel, material and time constraints.

- IEC activities at IGSS for factories were halted due to several factors including the resignation of authorities at IGSS after a case of embezzlement of funds was discovered, followed by the appointment of new authorities, their resignation, and again the appointment of new authorities. Lack of coordination and communication with the institution's maternal-and-child counterparts has delayed the printing or reprinting of some IEC products (e.g. FP post-obstetric event poster, FP brochures). Despite the fact that an IEC Section was created at IGSS, the Maternal-and-Child Health Department continues to be in charge of authorizing printing and distribution of IEC materials.

2.3. Result 3: MCH Programs and its Partner NGOs are Better Managed

- Management Systems Improvements are implemented to increase effectiveness of MCH Service Delivery
- Improved Program Planning, Monitoring, and Evaluation through the Use of Quality Data.

2.3.1. Logistics Results and Plans

During the year 2003, *Calidad en Salud*'s logistics team continued to work with organizations providing family planning services to Guatemalans, especially with the MSPAS, IGSS and NGOs that make up the outreach program, in the process of on-going improvement to logistics systems.

This has been a very productive year for the logistics component during which numerous activities and products were successfully finalized and delivered. During this year, the principal accomplishments were: a) training in logistics administration of 100% of the staff working in logistics of contraceptives among *Calidad en Salud* counterparts, b) development of four logistics manuals for the MSPAS and IGSS, c) development and implementation of logistics management information systems, d) performing national inventories of contraceptives, e) implementing field visits to all service levels on a quarterly basis, f) information dissemination, g) implementing activities that form part of a contraceptive security initiative in Guatemala, and h) linking with other organizations and units within the MSPAS, such as the UNFPA, HIV/AIDS, UPS-1, SIGSA-SUI, GETSA, John Snow, the POLICY project, and APROFAM.

Because the achievements are numerous and they themselves subdivided into several components, in this report they have been organized into seven main areas (support to logistics staff at all levels, training, planning and coordination, manuals, logistics information systems, contraceptive security, and institutionalization)

Support to Logistics Staff

Obtaining the support of and commitment from logistics staff at all levels is a crucial element to ensuring an adequate distribution of contraceptives. Within the MSPAS human resources are limited, in many cases the same person attends to numerous activities, thus, minimizing the time available for improving the logistics management of contraceptives. Our activities have been geared towards promoting the importance of contraceptive logistics management as an ingredient for achieving better health for the Guatemalan population. With this aim in mind and in order to improve and promote teamwork at the central, DAS and health post levels, the following activities were carried out during the year 2003:

- Physical Inventory of Contraceptives: Two inventories of contraceptives at the national level were carried out. During field visits to the area directorates (DAS), the Technical Logistics Team (ETL)[2] not only carried out a physical count of contraceptives, but also took the opportunity to interact with the warehouse staff, listen to their concerns and provide technical assistance to clarify and strengthen procedures. Almost at every point, the ETL which carried out the physical count in the 26 DAS, found a positive change in the attitudes of warehouse personnel towards contributing to an improvement in the logistics of contraceptives.

  For the year 2003, the stock levels across the family planning program of the Ministry of Health in quantities and in number of months of consumption are summarized in the following table:

Table 32 - End of Year Contraceptive Stock Levels (Program wide)*

[2] The ETL, *Equipo Técnico en Logística*, was informally created by various organizations working in logistics in Guatemala to coordinate better and meet priority deadlines. Members of the team are *Calidad en Salud*, UE, FNUAP, USAID, and USME.

Method	Quantity on Hand	No. Of months of consumption in stock
Depo Provera	175,681	9.8 months
Lo Femenil	828,149	15.1 months
Condom	2,688,650	12.5 months
Copper T	5,751	13.2 months

* This analysis is based on adjusted year 2003 consumption and inventory data contained in the Pipeline system and as a result of the national level inventories respectively. This information was reported in the 2004 CPTs.

In previous physical inventories, *Calidad en Salud* provided technical assistance to the PNSR in all phases of the inventory process (field work, data entry, data processing, and report generation). This year marked the beginning of the institutionalization of this activity within the PNSR, and the responsibility for generating the report has been transferred and absorbed in phases by the PNSR staff thereby building in-house capacity to guarantee the generation of inventory reports in the future. As part of this institutionalization process, *Calidad en Salud* developed and delivered a simple tool for generating the reports for all indicators once the information has been entered into the database.

Calidad en Salud's logistics team assisted the PNSR in carrying out a very successful workshop where all the directors from all the DAS and the logistics personnel were invited to witness the presentation of the stage of contraceptive logistics in terms of levels of months of consumption on hand, adequacy of utilization of forms and adherence to the minimum and maximum level norms.

In addition to the inventory work at the MSPAS, *Calidad en Salud* supported: a) the Maternal and Child Health unit of IGSS in the implementation of a national inventory of contraceptives in close coordination with the unit of internal auditing (all 42 IGSS units were inventoried), and b) by providing a newly improved data collection for the UPS-1 and APROFAM to allow them to assess stock levels at the NGO service expansion program.

- Consensus Building: The logistics team has taken advantage of every opportunity to make a consensus building presentation to different staff levels within the MSPAS working in logistics of contraceptives. The focus of the presentation is the importance of the logistics of contraceptives for an effective and efficient family planning program, stressing the point that "without product there is no program". In the presentation, the trends in population growth in Guatemala and contraceptive prevalence and in the decline in fertility were highlighted, as well as the importance of providing safe and good quality family planning services to the population of Guatemala. A perspective on population growth versus the ability of nations to provide basic services to their citizens was included. The curricula utilized for this presentation was developed by *Calidad en Salud's* logistics team and it was presented on several occasions: a) at the logistics workshop for USME personnel, b) at the logistics management information system training workshops in Zacapa and Solola, c) at internal meeting with *Calidad en Salud's* area facilitators and regional technical assistants, d) at invitations by USAID, UNFPA, DASs of Chimaltenango, Quetzaltenango, Solola, Huehuetenango, and Quiche, and e) at the socialization of the projections results with the staff of the MSPAS and IGSS.

  The presentations were well received by very interactive audiences at all events.

- Field logistical support visits**:** Aware of the limitations in terms of human and financial resources of USME to perform systematic supervisory visits to assess the adequacy of the administration of the logistics of contraceptives at all levels of the MSPAS, the ETL implemented field visits on a quarterly basis to the following DAS: Sacatepequez, Jutiapa, Jalapa, Izabal, Chimaltenango, Solola, Chiquimula, Zacapa, El Quiche, Ixil, Peten Sur Oriental, Peten Sur Occidental, and Peten Norte, Quetzaltenango, Huehuetenango, Escuintla, Totonicapan, Santa Rosa, Guatemala, and San Marcos. During this year, the information

collected during these visits was tallied and analyzed. The visits were very productive, and led to several achievements worth mentioning:

- The limited availability of LMIS forms was a serious problem, particularly in the non-priority areas. This problem has been greatly solved as documented by the improvement in the relevant indicators (utilization of Kardex and BRES).
- Amounts of DepoProvera required in the requisitions were calculated and delivered based on the amounts of empty vials, rather than based on the real average monthly demand. This problem has been universally removed.
- On site assistance and personal training in the proper use of the computerized logistics module has been provided. This has helped in speeding up the understanding that the LMIS is there to facilitate the processing of the BRES and not to result in a duplication of activities.
- Detection of leakages of medroxiprogesterone in San Miguel Ixtahuacan (district of San Marcos) that were reported to internal auditing.
- As the result of numerous requests, priority was given to preparing the empty vials of DepoProvera through out the network of warehouses for final destruction.
- The visits led to the re-distribution of contraceptives where over supply situations existed. Contraceptives were redistributed to those districts with stock levels beneath the minimum level.

- Bulletin**:** One bulletin was developed and distributed with the purpose of maintaining staff at all levels informed of the numerous activities and achievements towards improving the logistics system. It has helped to promote team spirit.

- New Warehouse: *Calidad en Salud* has assisted the PNSR in securing a better warehouse for contraceptives. The previous warehouse lacked the adequate capacity, security, and conditions to ensure the quality and safety of the stock. A new warehouse was located after an exhausting search and the move of commodities to the new warehouse was completed.

- Monitoring and Evaluation Plan: *Calidad en Salud* has revised the previous set of logistics indicators in order to update the monitoring and evaluation plan for the MSPAS, IGSS, and the process for extension of coverage with the NGOs. Due to the fact that there will not be a stock out survey conducted beyond 2003 and that the logistics management information systems are entering their implementation stage, the indicators were revised and a plan completed and submitted to USAID.

- Design of a Logistics System for the NGOs: *Calidad en Salud* worked with personnel from the UPS-1, PNSR, APROFAM and USAID, in analyzing the procedures for distributing and recording logistics data (contraceptives and medicines) for the NGO extension of coverage process. Based on the group's decisions, *Calidad en Salud* documented through a design document how the system should work. All procedures agreed upon were reinforced through the extensive training to accountants, ambulatory medics, and institutional facilitators.

- Revision of the Logistics of Contraceptive Supervision Guide: During 2003, the previous guide to be used during supervision visits by USME was revised and summarized so that only essential indicators could be supervised. Specifically, the revision was made to the component of the guide that focuses on the logistics of contraceptives. The tool was summarized due to the considerable amount of time involved in filling up the previous guide and the need to minimize the number of tasks for the team of supervisors. Although the USME decided not to include the supervision guide for logistics of contraceptives, it authorized the PNSR to institutionalize it within the program. It has been used for over a year and a half with excellent reception and results for its usefulness and friendliness.

Training

In terms of logistics, the year 2003 has been a training intensive year.

- Training in Logistics Management for MSPAS Personnel: *Calidad en Salud* supported the PNSR in implementing refresher training in logistics management of contraceptives for approximately 200 logistics staff from the MSPAS. As part of the awareness raising efforts, a presentation on the progress of the FP program and its impact on demographic and fertility trends were included in some of the trainings. The legal framework under Article 47 of the National Constitution guarantees the freedom of the people of Guatemala to choose the number of children they wish to have and birth spacing. Both of these issues were reinforced during the training activities. *Calidad en Salud*, together with the UE, UNFPA and USME, participated in all of the training sessions and provided the educational materials required for them.

- Training in Logistics Management for SIGSA-SUI Personnel: *Calidad en Salud* provided training for the SIGSA-SUI personnel working in the development of the logistics module. This activity was essential for transferring the system requirements to said personnel.

- Training in the use of the Logistics Module to DAS and district level logistics personnel: *Calidad en Salud* provided intensive training to over 400 people, including professional nurses, warehouse staff, and statisticians in the proper use of the logistics module.

- Training in Logistics Management for Ambulatory Medics and Institutional Facilitators: *Calidad en Salud* developed a curriculum specifically for the logistics responsibilities of the Ambulatory Doctors (MAs) and Institutional Facilitators (FIs). During the year 2003, *Calidad en Salud* developed the training plan for training the remaining 500 MAs and FIs from all the NGOs associated with the process of extension of coverage. During the year 2002, the first group of 50 MAs and FIs trained.

- Training in Logistics Management of Contraceptive Supplies to IGSS Personnel: *Calidad en Salud* customized a curricula for the IGSS logistics system based on the norms stipulated in the logistics manuals. 127 staff members in charge of logistics of contraceptives and medicines were trained through six two-day training sessions; among the trained were storekeepers, nurses, doctors, and top-level executives and directors from the institution.

- Training in the use of the Logistics Module for NGO Personnel: *Calidad en Salud* provided technical assistance to the SIGSA-SUI for the adaptation of the MSPAS´s Logistics Module to serve as a tool for monitoring logistics management of contraceptives and medicines for the Process of Extension Coverage. Further more, *Calidad en Salud* participated in a four week long training program for the NGO staff (see Support Systems section of this report for more detail).

Planning and Coordination

Calidad en Salud has carried out and coordinated numerous logistics related activities with the following institutions and programs:

- UNFPA: Work was carried out to coordinate the design of training plans, development of computerized logistics module, preparation of annual contraceptive procurement tables, and to support MSPAS and IGSS personnel in their ongoing efforts to improve logistics administration of contraceptives.

- HIV/AIDS: Technical assistance was provided to develop a strategy for the distribution of condoms for protection against HIV/AIDS and to help in the identification of priority areas. Meetings were held with APROFAM to review the curricula to be used in the training of NGO bookkeepers and outpatient doctors, as well as for programming workshops and defining forms to be used for recording information.

- UE/PNSR/DAS: Participation in the preparation of quarterly and annual operational plans, including the scheduling of activities and budget estimates.

- SIGSA/SUI: Coordination of activities for completing all four stages in the development of the simplified logistics management information system (logistics module) and for supporting the training of end users of the module.

- *Instituto Guatemalteco de Seguridad Social (*IGSS): *Calidad en Salud's* logistics team has worked closely with the IGSS logistics staff in four main fronts: a) in continuing an induction process for the new personnel and counterparts that include detailed training in the use of the Pipeline software, b) in initiating a contraceptive security initiative (see Contraceptive Security section of this report), and c) in the development of LMIS. (See LMIS section of this report).

- Internal Auditing of the MSPAS: *Calidad en Salud* coordinated with internal auditing of the MSPAS in order to follow up on the occurrences of leakages of DepoProvera. In addition, a batch of medroxiprogesterone was found solidified as reported by Huehuetenango. PNSR is taking precautions to detect these types of occurrences when receiving the product from donor organizations so that it is properly reported at the time of reception.

- UPS1, APROFAM, NGOs: *Calidad en Salud* has taken the lead in inviting members of NGOs, UPS-1 and APROFAM to review the status of the logistics of contraceptives through the network of NGOs associated with the process of extension of coverage.

  In addition, the logistics team of *Calidad en Salud* attended the regional conference on contraceptives security. Representatives from nine nations participated in the conference. Lessons learned are already being applied.

Manuals

The year 2003 witnessed the culmination of activities for socializing the logistics management manuals developed in 2002 within the MSPAS and IGSS. The Conceptual Framework for Logistics Management within the MSPAS was officially approved with the management agreement No. 10-2003.

Manuals for the MSPAS: The "*Manual de Gestión Logística de Anticonceptivos"* was finalized, printed, and distributed to all levels of the MSPAS program as part of the materials used during cascade logistics management training implemented throughout the year. In addition, the "*Manual de Logística y Procedimientos para el Control de Suministros*" has been finalized, and printed. Its distribution and socialization took place during a meeting on March 24, 2003 with the DAS directors and also through the nation wide training in logistics management of contraceptives.

Manuals for IGSS: Furthermore, *Calidad en Salud* continued to work during the year with IGSS staff on the development of logistics manuals for the institution. Both the "*Manual de Gestion Logistica*" and the "*Manual de Normas y Procedimientos de Logistica de Anticonceptivos del Componente de Planificacion Familiar*" have gone through the final writing stages, were submitted to USAID for review and feedback, and were finally approved by IGSS leadership.

Logistics Management Information Systems

In order to empower decision makers and administrators to make better decisions concerning amounts of contraceptives, *Calidad en Salud* has been working with the SIGSA/SUI of the MSPAS in the development of a simplified logistics management information system (LMIS). During the last year, and in only four months, a system was designed, programmed, and the beta version of it was ready for testing. During the month of February 2003 the system was tested at the DAS of Guatemala and once adjusted based on the experience of the testing stage, the system was decentralized to the DAS level through the implementation of two training workshops. During the remainder of the year, the logis tics module was further decentralized down to the district level. *Calidad en Salud* assisted the SIGSA-SUI in the training sessions for district level personnel and has provided logistics management orientation to engineering personnel of the SIGSA-SUI (7 SIGSA-SUI staff members were oriented) so that in the future they can implement similar training and re-fresher training as needed. As of today, 85% of the DAS and their

districts have been trained by the SIGSA-SUI with the support of *Calidad en Salud* and UNFPA (390 district level staff were trained) in the use of the logistics module. In addition, during the quarter's training sessions several bugs were detected and *Calidad en Salud* has been providing technical assistance for properly debugging the logis tics module.

Equally, during this quarter, *Calidad en Salud* has worked closely with the IGSS logistics staff in finalizing the design and programming stages of the logistics module. The logistics module for IGSS has a very specific scope; it has been designed and developed to provide decision makers at the Maternal and Child Health unit with the ability to monitor patterns of consumption and distribution down to the unit level and to assess stock levels at any point in time. The system will complement the Pipeline as a tool for decision-making. While the Pipeline aids in assessing past, present, and future trends in demand at the national level, the LMIS further expands this ability allowing for similar analysis at the departmental and unit levels. The system has been delivered, installed, and the first six months of data for 2003 have been digitized.

Contraceptive Security Initiative

Calidad en Salud began working on a Contraceptive Security Initiative in Guatemala during the last quarter of 2002. During 2003, several activities were accomplished despite delays encountered due to the numerous changes within the MOH including the National Reproductive Health Program and the leadership of IGSS. These advances are detailed below:

- Institutionalization of the Contraceptive Security Initiative Work plan: The original work plan was revised and upgraded to reflect feedback provided by USAID, the MSPAS, and IGSS through the work plan review meetings. The plan was developed by *Calidad en Salud* and numerous meetings were hosted to present the plan to the MSPAS and IGSS. The audience at the MSPAS included the Minister of Health, the Vice Minister, the director of *Regulacion, Vigilancia y Control*, the chief of strategic planning, and the director of the National Reproductive Health Program and his staff.

  The plans have been accepted by both organization and *Calidad en Salud* awaits the official letters of acceptance.

- Contraceptive Procurement Tables: During this year, *Calidad en Salud* has provided technical assistance to the MSPAS and IGSS in the annual review of the 2003 and in the generation of the 2004 contraceptive procurement tables. With the objective of institutionalizing the CPT process, *Calidad en Salud* provided hands-on training and guided MSPAS and IGSS staff through all the stages of development and review of CPTs. For the first time, the review was entirely implemented by the local staff, including the upgrading of the Pipeline with consumption data, information on shipments received and in transit, and physical inventories. In addition, *Calidad en Salud* guided both local organizations and the UNFPA in the process of transferring funds to cover their contribution of total cost within the agreements with the UNFPA.

- Financing: Technical assistance was provided to the MSPAS, UE, UNFPA, and USAID for implementing a modification to the agreement between the MSPAS and the UNFPA so that the amounts of future donations are in-tune with a fast growing demand. Current levels of demand are higher than what was originally projected. Such modification includes the additional funds for procuring contraceptives for the years 2003 to 2005. Proper documentation for the modification was presented to the Department of Public Credit so that the necessary funds could be registered and programmed.

  Calidad en Salud brought about awareness of diminishing central level inventories and the need to accelerate the transfer of funds from the local organizations to the UNFPA so that the procurement process can be initiated on time and shortages can be avoided. Funds equivalent to 20% of the total cost of contraceptives needed to meet the anticipated demand for 2003 were transferred to the UNFPA. To date, the MSPAS has paid the UNFPA US$189,000 that represents a 20% contribution to the total value of contraceptives required for the year 2003 and as stipulated in the agreement between the UNFPA and the MSPAS. This amount corresponds to the original agreement amount of US $106,000 and to a later amendment to the agreement in the amount of US$83,000.

In relation to IGSS, the advances in terms of financing of contraceptives can be described as follows:

An amount of US$180,000 was assigned to the department of Stocks and Supplies for the sole purpose of purchasing contraceptives.

For the first (emergency) shipment, IGSS paid the bill submitted by UNFPA in the amount of US$2,100.

IGSS has processed payment of an additional voucher in the amount of US $11,850 for the second shipment, and is securing funds to pay the UNFPA a third and final shipment for the year in the amount of US $21,350.

Three meetings were held with personnel from the Maternal and Child Health unit, Internal Auditing, Stocks and Supplies, Budget, and *Calidad en Salud* with the purpose of evaluating and streamlining the financing process for contraceptives.

- Projections of Contraceptive Needs: With the purpose of guiding family planning program directors, leaders, and decision makers, projections of contraceptive needs were developed for the years 2003 to 2008. Projections were developed for the country as a whole utilizing population and demographic parameters, and for each organization (MSPAS, IGSS, APROFAM, NGOs) based on history of consumption by method. These projections are of vital importance, particularly for anticipating the amounts required for procurement and for initiating the process in advance to secure necessary funds for the future.

  The projections were presented during two separate events to decision makers from the PNSR and from IGSS. The projections document includes: a) a set of global projections, b) implications of unmet need compared to total future demand, c) analysis of distribution of quantities of condoms for the HIV-AIDS program, projections for each organization and an analysis of their contribution to total cost by year under a possible arrangement with donor agencies, and d) an analysis of global projections based on demographic parameters with aggregates of projections by source based on history of consumption.

- Contraceptive Security Committee: The Government Agreement for the formation of a Contraceptive Security Commission was revised once more based on recommendations made by the department of legal counseling of the MSPAS. The recommendations included the elaboration of a more specific set of objectives (motives) for the formation of the commission, which was developed by the POLICY project. Today the new version of the governmental accord has made it all the way to the presidency and is pending his signature and final approval. The members of the commission have been meeting on a regular basis to develop the regulations for its operation.

- Basic Listing of Medicines: The MSPAS uses a basic listing of medicines, which according to WHO, USAID, and UNFPA, is not yet an official standard organizational basic listing. The reason for this is that all 26 areas utilize their own individual listing and standardizing it into one continues to be a challenge. The WHO was providing assistance for standardizing the list and presented a plan early in the year to the MSPAS, but results of their efforts have not yet been seen. At a recent meeting within the MSPAS, the standardization process was re-assigned to Dr. Manuel Zeceña, director of the Supervision, Monitoring, and Evaluation unit. A meeting was to be held so that all technical expertise available could participate, but to date this meeting has not taken place. Due to these delays, the PNSR has advanced on its own, and has begun to develop a basic list of medicines and contraceptives specific to the PNSR.

  At IGSS, the basic listing of medicines was updated in the year 2002 with technical assistance from WHO, and contraceptives were included.

- Contraceptive Procurement Guide for the MSPAS: *Calidad en Salud* is developing a guide to aid the personnel of the PNSR in implementing all the relevant procedures for successfully completing the procurement of contraceptives through agreements with the donor community. The guide includes step-by-step and best practices to effectively complete all procurement processes including contraceptive needs projections, obtaining financial resources, requesting a purchase from a provider, following up on

shipments, receiving and registering shipments, and making final payments to providers. The final version of the guide for the MSPAS has been submitted to USAID for review and approval.

- Assessment of Procurement Capabilities of the MSPAS: *Calidad en Salud* is in the process of documenting the activities that led to the creation of the contraceptive procurement guide and the overall capabilities of the MSPAS in performing procurement activities with the donor organization. To date, these processes are led by technical assistance from *Calidad en Salud* and UNFPA. The assessment will include a detailed analysis and revision of the Law for Procuring and Contracting of the State, particularly in the sections related to: a) general procedures, b) competent organisms, c) bidding, d) budgeting, e) contracts, f) payments, g) insurance, h) registration, and i) prohibitions and sanctions.

Intitutionalization

The activities implemented during the quarter have lead to significant improvements of the logistics infrastructure of the MSPAS and IGSS. Personnel continue to improve their skills, a fact well demonstrated by their high levels of commitment observed during the implementation of the activities mentioned in this report and as described below:

- Staff from the PNSR for the first time implemented the revision of the 2003 CPTs with limited guidance from *Calidad en Salud*.
- Staff from IGSS for the first time implemented the revision of the 2003 CPTs with limited guidance from *Calidad en Salud*.
- Staff from the PNSR for the first time took the lead in the implementation of the March and September 2003 National Inventories of Contraceptives.
- Staff from both the PNSR and IGSS have on their own maintained the up-to-date Pipeline software and have sent monthly reports to *Calidad en Salud*, the UNFPA, and USAID.
- Staff from the SIGSA-SUI have taken the lead in the training and installation of the logistics module to the district level. They have generated the material for the training sessions and have developed the training plan. *Calidad en Salud* has accompanied the SIGSA-SUI to several of the training workshops.
- The logistics staff from the UE has taken the lead at visiting numerous warehouses and finally identifying an adequate warehouse and completing the transferring of commodities to it.
- The staff at the PNSR have been very involved in processing the Governmental Agreement for the generation of a National Commission for Contraceptive Security, and have provided valuable input for improving the content of it.
- A good working relationship has been established between the staff of the SIGSA-SUI and the PNSR. This has been demonstrated in the implementation of the logistics module.
- A good working relationship has been established between the staff of the PNSR and IGSS. This was demonstrated in the successful lending of injectables from one organization to the other.
- Key staff members from IGSS actively participated in all training sessions and on their own have initiated the meetings for streamlining the financial process. In addition, the organization's national inventory was carried out with limited intervention from *Calidad en Salud*.
- Leaders have emerged in the several DAS in logistics, such as the case of Guatemala, San Marcos, Santa Rosa, and Sololá. Staff from *Calidad en Salud*, UE, and the UNFPA has observed significant changes in the levels of commitment for improving contraceptive logistics among these staff members.

- Supervisory guide institutionalized within the PNSR. This guide has been utilized for four quarters in the implementation of logistics field support visits. In addition, it has been provided to the logistics staff at the DAS level for them to implement cascade visits to districts and health posts.

- Conscience levels have been raised. Very strong participation was observed that during discussions generated by the presentations for building commitment and for presenting the results of the projections of future contraceptive needs (2003-2008).

- Improvements in stock level indicators as documented by the March and September 2003 national inventories of contraceptives.

Limitations in Logistics

The main constraint to programming and carrying out activities in logistics continues to be the limited availability of resources in local organizations. For this reason, some activities have to be re-programmed, which delays implementation.

The recent changes in leadership within the MSPAS and IGSS are responsible for the delays in meeting targets and deliverables on time. The reason has been that with the changes, the new personnel has had to be re-trained, re-educated about the plans, updated on progress thus far, and upcoming activities.

The new personnel have arrived sometimes without any prior experience in family planning logistics management. Therefore, *Calidad en Salud* has had to educate them and convey to them the importance of the logistics of contraceptives in order to obtain their support.

Supervision continues to be a challenge. The Supervision, Evaluation, and Monitoring Unit of the MSPAS still faces significant challenges. Limited human resources find it hard to monitor an array of medicines, products, and contraceptives. The scope of work of the unit is way too extensive and complex for a unit with minimal human resources.

The PNSR still cannot count on the unit's ability to perform on-going supervisory visits to over 1,200 service delivery points and additional warehouses across the country.

Passive resistance has been noted among users of the newly developed and distributed LMIS within the MSPAS. The main fear is that staff will be more closely monitored by the SIGSA-SUI and could easily be held accountable should any abnormality be noted in the distribution of contraceptives to clients. The system can now easily spot occurrences of leakages.

The extension of coverage process still faces numerous challenges in order to provide contraceptives to the population through this process. Among these challenges are:

- Lack of adequate resources to supervise and assess in a systematic way the well functioning of the logistics of contraceptives of the process.

- Existence of strong cultural and religious barriers that complicate the delivery of family planning services in certain areas.

- The managerial staff is limited in terms of available human resources to properly supervise the logistics of contraceptives and to fully understand the importance of family planning methods to the national development and social plans. In addition, implementers of the extension of coverage process are limited when helping the NGOs reach higher levels of performance in terms of generation of CYPs. The concept of CYP generation and target setting is not yet adopted within the program's operating culture.

- CYP generation and/or levels of family planning services are not indicators utilized for certification thus many NGOs do not see the need or do not prioritize the delivery of these products. The provision of family planning methods thus falls victim to the perceived priority to provide other health services and medicines.

2.3.2. Monitoring and Evaluation Results

Introduction

The transfer of the SAM process to the MSPAS (UPS1-SIGSA) was carried out, with the new system being renamed *Sistema Automatizado de Monitoreo de Información Gerencial* (SAMIG). The process included the development of service provision, financial administration and logistics modules, as well as support for the implementation of the system and training of the NGOs in the eight priority health areas. The redesign of the AIEPI AINM-C strategy's monitoring system was also carried out with the development of a group of 34 indicators, classified into three categories: quality (6), supervision (8) and monitoring (20). These indicators were discussed with the *Calidad en Salud* personnel and their MSPAS counterparts and all parties were in agreement with the number and structure of the indicators.

Objectives for the Monitoring Sub-Component

- Improve the monitoring process for activities and indicators of the MSPAS institutional systems at all levels, through the review, update and standardization of the concepts, norms, processes and instruments
- Review, update and standardize the monitoring of activities and indicators, including the extension of the project and the new operations research studies, in order to provide better feedback to different components of the project, to present reports develop and reprogram resources and activities
- Support the MSPAS (UPS-1-SIGSA) in the development, validation, implementation, training and use of processes for the *Sistema Automatizado de Monitoreo de Información Gerencial* (SAMIG) in the eight priority health areas
- Obtain the endorsement of the MSPAS for the implementation on the AIEPI AINM-C's Supervision, Monitoring and Evaluation system and begin to incorporate the system into the *sala situacional* at the local level

SAMIG

During 2003, in the process of transferring SAM to the MSPAS a support and monitoring group, was established between UPS-1-SIGSA and *Calidad en Salud*, in order to verify, guarantee and monitor the tool's use at the national level. In addition, with the help of the UPS-1, a work plan was produced in order to ensure that the process of transferring the tool was completed and ready to be implemented in the 8 priority health areas by June 2003.

At the time of the technology and empowerment tool's transfer in March 2003, the MSPAS had the infrastructure and logistics necessary to make minor modifications, adaptations and in some cases create new applications to capture, gather and consolidate the information generated by the Extension of Coverage Process at the primary level of care. SAM was then successfully implemented and the *Sistema Automatizado de Información Gerencial* was created, named SAMIG. SAMIG is an institutional and official system, and the exclusive property of the MSPAS.

In April, the study and analysis for the creation of new service provisions, financial administration and logistics modules commenced. The modification and adaptation of other existing SIGSA modules to be used in the applications for information gathering of the Extension of Coverage Process also was achieved.

The end of July saw the implementation of the service provision and logistics modules for the eight priority health areas, reaching the goal to be completed in 2003 in order to certify agreements between the MSPAS an NGOs.

Implementation coverage was 91% (51 of the 56 NGOs that have an agreement with the MSPAS in the priority areas) and 126 people from these organizations received training (See Table 1). One of the major accomplishments was the strengthening of the reference and communication systems between UPS-1 and SIGSA.

The financial administration module has been developed and tested at the technical level, only pending is its evaluation by the UPS-1 financial department. The institutionalization of the SAMIG process is in its final phase, which supports the Extension of Coverage Process and the MSPAS in its management of information to make management level decisions.

Table 33 - Personnel trained in the service provisions and logistics modules of SAMIG By Health Area

Health Area	NGO's Trained Personnel[3]
Totonicapán	11
Quetzaltenango	22
Huehuetenango	31
Sololá	12
Chimaltenango	11
San Marcos	12
Quiche	22
Ixil	5
Total	126

UPS-1 –MSPAS

Both the database and the software applications that comprise the *Sistema de Información Geo-referenciado* (SIGER) were designed and now include family planning and AIEPI AINM-C strategies. The mapping module was updated, creating a new map structure and geo-reference update for the MSPAS network of services.

Unidad Ejecutora

Support was given to the study, definition, design, installation and implementation of a *Unidad Ejecutora* internal network of information. This process included the creation of reference terms for the purchase of equipment, and software, for the data server and applications; the installation and running of the network, user configuration and security, as well as Internet connection. Currently the *Unidad Ejecutora* has a functioning Intranet, adequate to its needs and developed according to the norms and guidelines established by the unit.

IGSS

Support was given to study and mo dify an instrument that estimates cost of the Institute's extension of coverage process.

ENSMI 2002

Personnel from *Calidad en Salud* were part of the Grupo de Apoyo Técnico (GAT) of the ENSMI 2002 that developed and reviewed the final report. Important technical and logistical support was given by *Calidad en Salud,* which eventually became the most active group with the most participating members.

[3] The NGO's trained personnel includes accountants, data entry personnel and in some cases the legal representative.

Calidad en Salud

Review and Update of *Calidad en Salud's* Monitoring Plan

The final results of the ENSMI 2002 were officially delivered in October that allowed for *Calidad en Salud*'s monitoring plan to be updated. The monitoring plan includes 13 indicators and comparisons that can be calculated and compared on a five year basis and its calculation depend on the ENSMI´s 1998-99 and 2002 results. 100% of the indicators showed a positive change in 2002 with respect to ENSMI 1998-99 results; 9 indicators (69.2%) achieved and/or surpassed the proposed goal, 3 indicators (23.1%) did not achieve the proposed goal and 1 indicator did not have a goal. (See Table 33).

Table 34 - Five Year Indicator Comparison (1998-99 – 2002) of CS Monitoring Plan

Component	Status[4] 1999	Goal 2002	Achieved[5] 2002	% Change
Integrated Management of Childhood Illnesses – IMCI				
Infant Mortality Rate[6]	457	41	39	? 13.3
Children younger than 6 months receiving exclusive breastfeeding	39%	50%	50.6%	? 29.7
Percentage of children from 12 to 23 months having received all doses of				
DPT 3	70.4%		76.7%	? 8.9
POLIO 3	66.7%		78.1%	? 17.0
BCG	90.4%		91.9%	? 1.6
Measles	80.6%		74.4%	? 7.7
Percentage of children under 5 years treated with Rehydrating Salts Therapy (oral rehydrating salts or increase in liquid intake)	59%	65%	66.3%	? 12.3
Percentage of children younger that 5 years with pneumonia treated by health personnel	37%	45%	64.3%	? 73.7
Integrated Women's Health Family Planning				
Prevalence of contraceptive use (modern and traditional methods)	38%	41%	43.3%	? 13.9
Global Fertility Rate	5	4.8	4.4	? 12
Unsatisfied Family Planning needs	23%	22%	27.6%	? 20.0
Reduction in difference of prevalence of contraceptive methods use between indigenous population and ladino population	3.98	3.0	2.2	? 43.5

[4] Source ENSMI 98-99
[5] Source ENSMI 2002
[6] Infant Mortality Rate corresponds to five years (between 1997-2002) before the survey.
[7] Per 1,000 live births
[8] Times higher

Component	Status[4] 1999	Goal 2002	Achieved[5] 2002	% Change
Intergenesic Spacing of at least 2 years	68%	75%	70.1%	? 3.0
Behavior Change Communication				
Percentage of women from 15 to 49 that have heard FP message on the radio or television during the past 12 months	30.5%	40%	56.2%	? 84.2
Percentage of women from 15 to 49 that do not use contraceptives, that have visited health services (any reason) in the past 12 months and discussed FP with a health care provider	6.9%	14%	9.1%	? 31.8
Percentage of women from 15 to 49 who do not use contraception that have been visited by a community agent and have discussed FP in the past 12 months	0.4%	5%	0.8%	? 100.0

Redesign of the AIEPI AINM-C Monitoring System

The redesign of the AIEPI AINM-C strategy's monitoring system resulted in the definition of 34 indicators, classified into three categories: quality (6), supervision (8) and monitoring (20). Indicators were discussed with *Calidad en Salud* personnel and counterparts from the MSPAS, reaching definitive agreement for all parties.

The indicators allow for the gathering of information of promotion and prevention activities (PP) and integrated case management (MIC) and include maternal child health, community participation and training. There are also indicators for each member of the basic health team (EBS).

The flow of information for the gathering and consolidation of these indicators is largely based on the official and routine forms and procedures carried out by the NGOs, the districts and the health areas. The information gathering will be obtained from the official SIGSA forms the *balance, requisición y envío de suministros* (BRES), and the monthly monitoring form. Consolidation at the NGO level will be the responsibility of ambulatory doctors and institutional facilitators, and will be done manually or electronically in data sheet designed and developed by *Calidad en Salud*. Consolidation and information gathering at the area level is the responsibility of the extension of coverage coordinator and of the UPS-1 at the central level.

Personnel from the eight DAS were trained in the definition, consolidation and use of the 34 indicators mentioned above. A total of 37individuals, among them doctors, professional nurses and coordinators of extension of coverage were trained.

During the month of October, UPS-1 officially presented the 34 indicators. In coordination with the AIEPI AINM-C team and as part of the strategy's monitoring activities, coordination meetings were held with the eight DAS teams. The main finding from these meetings was that 100% of the eight DAS socialized the indicators with the NGOs.

Support was given to gather and consolidate the "*Situación Actual del MIC*"[9] instrument. This instrument gathered information related to the application of the integrated case management protocol by the MA's and FC's; also on the availability of the protocols for children and women, the IEC materials, equipment, medicines and family planning methods needed to apply integrated case management adequately. The data shows that there are limitations in all of the supplies and resources needed for the correct application of integrated case management.

[9] Information was gathered the convenience sampling of approximately 10% of community centers in the 8 priority health areas; reason for this results ought not be generalized.

Field visits were made to monitor the growth monitoring sessions conducted by the *Vigilantes de salud;* unfortunately none of these visits coincided. There also was monitoring of the *vigilante's* notebook use and the following problems were observed: a) lack of or incomplete filling out of the heading of the notebook ; b) inability to register more than 20 children (in some cases the VS have more); c) absence of the date of the first weighing session (prerequisite for calculating the age by month of the children); d) inexact estimate of the age of the child; e) no registration of the "ounces" part of the children's weight; f) inadequate estimate of the expected weight and g) inadequate classification and registration (grows well, doesn't grow well).

Development and Systematic Use of the *Sala situacional* for Decision Making at the Community Level

In conjunction with the community participation component, reactivating the use of the *sala situacional* as a forum for discussing the main health problems at the community level was begun. This is based on the timely use of information to develop a local plan of action. This work needs to be linked to the use of the monitoring system of the AIEPI AINM-C strategy, during the first quarter of 2004.

IEC

An Excel database was created to gather growth monitoring information included in the *vigilante's notebook*.

Supervision

Based on supervision instruments, a database was created in order to consolidate the information collected from the visits that ordinarily conduct personnel from USME.

IO-AEC[10]

- Coordination of the component collaborated with Operation Research staff in the design, development and execution of the baseline survey as well as the presentation of the preliminary report of the survey, the condition also participated in discussions with the OR manager, counterparts from MSPAS and ProRedes Salud.

Support was given to the development of a proposal for the cost study of the operations research, through meetings with a consultant. Also a database was developed to gather, consolidate, and analyze the cost analysis, which is being tested and valideted in coordination with personnel from ProRedes Salud.

Limitation

Although the participation of Ministry personnel in joint activities with *Calidad en Salud* has increased, limitations in human, financial and logistical resources still exist for a more effective and efficient participation of the mentioned personnel.

[10] See more detail in the IO AEC-PS section

2.3.3. Planning and Programming Results

Results

Development of management capacity building plan, which integrates principles of quality management

The MSPAS, with support from *Calidad en Salud*, has determined that a key element for institutionalizing and sustaining of activities supported by the project is the strengthening of management of the health personnel, with a focus on quality.

Calidad en Salud developed a proposal and contracted an international consultant, Dr. Bernardo Ramírez, to develop a Management Capacity Building Plan, with a focus on quality for the eight priority health areas' personnel, emphasizing the Health Districts. The consultant carried out the following activities: a) consultations and interviews with MSPAS national directors and selected personnel from the Areas and Health Districts; b) Interviews with *Calidad en Salud* operations personnel regarding their perception of the local teams management capacities; c) identification and analysis of educational programs in general management and health management in Guatemala, d) review of available materials related to the strengthening process, both in training as well as in monitoring and tutorials.

The plan is oriented forwards the Area director and his/her work team (epidemiologist, nurse, administrator, and health technician) and the District director and his/her work team (professional nurse, person responsible for IEC or health technician), and will have initial coverage in two Health Areas and progressively extend to the remaining areas.

A document was developed, a base to negotiate with the MSPAS, also communication and discussion activities have been done with Rafael Landivar and San Carlos de Guatemala universities, to convince them to endorse the plan for its implementation in 2004.

General Planning

The MSPAS, UE and *Calidad en Salud*, carried out the following interventions in order to comply with the Operational Plan's objectives of the Agreement in the different MSPAS units and programs and in the Health Areas:

Improvement of Processes

a) Planning: An operational planning methodology and process have been developed, and supported by the various regular technical programs of the MSPAS at the central level and by the Health Areas; its implementation has allowed an analysis of the results of the technical and financial execution of contract activities, by accompanying and monitoring such activities. In addition a trend has been set to use the POA as a basis to implement interventions and measure results.

The main task for the *Calidad en Salud* and the *Unidad Ejecutora's* teams has been defining the technical guidelines for each component, taking into account the activities carried out and the results obtained in each Health Area, in order to guide the activities that should be done.

In recent meetings during which the advancements of results were presented, the technical teams of 5 health areas mentioned that planning and programming has been a useful tool to help in the assignment of resources to improve the provision of services and to evaluation their implementation. All of this was not possible inside the programming with regular funds. In fact, personnel from the Health Areas are interested in continuing the planning process to establish what has been achieved, to evaluate permanently the process and terms to achieve better health results.

b) Budgeting: In order to study and achieve a better relationship between the financial resources and the goals and programmed activities, terms of reference to contract a consultant were drafted in order to support budgeting processes for the MSPAS. The proposal includes a new methodology for budgeting, consulted with and validated by the relevant central level and Area Directorate personnel. Specific objectives were the following:

- Conduct an analysis of critical areas in public financing of health in budget Guatemala, with special emphasis on limitations, related to the process of elaboration, negotiation and adjustment to the annual operational programming

- Identify the budget cycle stages, in its current configuration, pointing out components and steps that need modification or improvement

- Propose a methodology for the budgeting process redesign, its validation, regulation and support

Problems related to the availability of the consultant did not allow to advance in this process.

Implementation of the POA 2003

The MSPAS, the UE and *Calidad en Salud* organized two workshops in which all the component coordinators from the eight Health Areas participated in the review and adjustment of the 2003 Operational Programming of the Agreement developed the previous year.

The technical teams from CS and the UE conducted visits to modify plans in the Areas; each Health Area's technical team delivered its program plan to the *Unidad Ejecutora* of the MSPAS, quarterly or biannually.

Guidance was offered to the regional technical advisors (ATR) to support the Family Planning and Logistical in Administration's operational programming, in order that actions and activities of the Agreement inside be included the regular POA.

Calidad en Salud and the UE reviewed the Operational Programs according to the technical guidelines of each component and proposed adjustments to the corresponding budget assignment

Area and 1st-level facilitators promoted meetings and monitoring visits to Health Areas and Districts, in order to evaluate the monthly execution of each component activities, with emphasis placed on the institutionalization of family planning, AIEPI-AINMC and the support systems.

Development of the POA 2004

Calidad en Salud and the *Unidad Ejecutora* in support of the PNSR, developed the Annual 2004 Guideline and Planning and Programming Document with the following goals:

Develop each component's annual and quarter programming activities for 2004, relating them to the Strategic Plan "*Mejor salud para mujeres, niños y niñas del área Rural*" of the Agreement

Communicate and socialize the plans between the local and central level components central and local levels

Establish general and specific agreements for technical, administrative and financial support to achieve results, goals and indicators.

Various management and technical staff meetings were held in order to organize and develop component´s plans in project software; also program plans, instruments and programming instructions for each component (Forms A, B, C) These plans will include the objectives, goals, monitoring indicators and strategies, as well as general and specific activities at the level of the MSPAS and the health areas.

Programming, Monitoring, Evaluation and Control

Calidad en Salud and the UE together made monitoring visits to all the Health Areas, to ensure compliance with the local plans for each component and their financial execution. The main findings of these visits were: low expenditures, slow implementation, lack of communication between administrative and technical personnel, and lack of availability of equipment, supplies and medicines.

The UE and CS at the central and local level, along with facilitators have offered support and accompaniment both technical and financial, to the area teams in order to ensure that the interventions achieve the expected results.

Calidad en Salud and the UE, in conjunction with the *Programa Nacional de Salud Reproductiva* presented the 2003 advances, of the agreements during the event, the Vice Minister of Health, Dr. Mynor Cordón, stated the following. *"This presentation shows just how the Agreement's technical and financial support has been timely, effective and efficient in bringing health to the population."*

Coordination

Calidad en Salud accompanied by the US Ambassador to Guatemala, John Hamilton, the USAID Director Glenn Anders, and the USAID/Guatemala Cognizant Technical Officer Dr. Baudilio López coordinated a visit to the community of Chulumal III, Chichicastenango, Quiché to see first hand the extension of coverage services provided by a health NGO (ONG – CCAM). The Directors of the health area, the district and the NGO as well as the basic health team (FI, MA, FC) and the population receiving services were all present during the visit.

Calidad en Salud and the UE held various meetings with partners, including the MNH (JHPIEGO) and the *Programa Nacional de Salud Reproductiva* to plan, coordinate, communicate, present advancements, monitor and supervise the different interventions developed within the Agreement. The advances and results were presented to other health actors, among them, cooperating agencies and political parties in order to insure that activities developed under the Agreement be incorporated into future health plans.

Institutionalization

Calidad en Salud developed a proposal to improve the processes of planning, programming and budgeting at the MSPAS with the intention to institutionalize these activities implemented by the project and strengthened by the PNSR. The proposal was initially accepted by the UPE, but not further developed.

Limitations

- The DRVCS and the PNSR do not agree in having meetings to discuss monitoring of programming and a revision of guidelines, adjustments and advances made to the POAs on a quarterly basis with the health areas, this has been a limitation in the evolution of the technical execution of the activities as well as the identification of needs and goods at district level.

- Lack of involvement of the *Unidad de Planificacion y Programacion Estrategica* (UPE) in defining a unified method for the POA of the Agreement and the guidelines of the programs with regular funds, in order to institutionalize the activities supported by the project.

- Lack of definition and consensus between the Direction of Human Resources, the Direction of Regulation and the Programs Department to made viable the implementation of the management plan in the districts and areas.

- Lack of improvement mechanisms management systems in order to strengthen the effectiveness of the delivery of maternal child health services, specifically in the areas of planning, monitoring and program evaluation through the use and analysis of quality information

2.3.4. Supervision – Facilitation Results

Training Results

Training in Problem Solving Improvement Approaches

USME identified the need to receive technical training in order to learn how to adequately manage problems identified in the DAS and districts. With *Calidad en Salud's* support, USME personnel received training in problem solving improvement. The workshop sought to establish the relationship between process improvement and quality assurance to identify the steps and recognize the different quality improvement approaches to be applied during the supervision-facilitation visits at the different levels. A workshop was later designed to replicate the process improvement training in the DAS.

Replica Workshops on Improvement Approaches for the 8 DAS

Short, regional workshops were conducted that allowed for the improvement approaches to be applied to problems identified during the supervision-facilitation visits in the DAS. From the eight health areas of the Agreement, a total of 193 individuals participated.

Update Supervision-Facilitation Techniques for DAS personnel and district directors

An updating session was conducted in supervision-facilitation for personnel from the 26 health areas and district directors. The purpose of this update was to explain the changes made to the system and the supervision instruments after the December 2002 evaluation, derived from the negatives made by the technical personnel from the MSPAS's priority programs. It also was conducted to motivate the area and district personnel to continue with the supervision activities at the local level. An estimated total of 465 persons from the 26 areas and districts attended these update sessions.

Supervision System

System Improvement

Improvement consisted mainly of instrument modification following recommendations from area and district personnel and the consensus from epidemiologists, the MSPAS priority programs, the SIAS Epidemiology Department and the MSPAS 's human resources direction. Improvements of the system definition, the approach and the concepts were also made.

Instrument Printing and Distribution from DAS to the Districts

Once the support system's improvements were realized, the editing and design of the instruments and guides was completed. The printing of supervision instruments from the area to the health districts was the first stage. These instruments were distributed during the update supervision-facilitation activities to area personnel. Each DAS received one copy of these instruments, with its guide and instructions for each district. To date there have been a total of 275 documents delivered.

Supervision Instruments from the central level to the health areas, and instruments from districts to health posts

These documents are currently being printed. They are to be printed with counterpart funds and it is anticipated that they will be ready for distribution at the beginning of January.

Supervision-Facilitation Reference Manual

In conjunction with EngenderHealth, a supervision-facilitation reference manual was developed. This preliminary version will be reviewed and evaluated during January and February 2004, in different regions of the country.

Supervision System Implementation for 2003

During 2003, all Health Areas received central level supervision support on a monthly basis. The supervision process for the health areas to the districts, however, was not done periodically as expected, and supervision of the health posts, was even weaker due to the lack of necessary resources, especially in the districts. In general there is a lack of transportation and funds to carry out these activities. There were counterpart funds and regular funds programmed for these activities in conjunction with the DAS, to insure the supervision monitoring, and evaluation, but the execution of these funds was weak in the majority of the areas. Some of the Agreement's areas maintained continuous supervision activities thanks to the follow up work of *Calidad en Salud* area facilitators. Highlighted are the Sololá (100% supervision coverage for the first two quarters) and Quiché (75% coverage for the entire year) health areas which implemented and took advantage of the supervision-facilitation process to support their districts in problem solving. According to the information obtained from the area facilitators, the supervision-facilitation status in areas covered by the Agreement are as follows:

Sololá

Despite the Area Direction's instability due to a change in leadership four times during the course of the year, the supervision teams were established and the supervision from areas to districts process was carried out covering 100% of the districts during the first and second quarters of the year. The supervision of district to health posts was weak, and there was no follow up from the USME, leading to a decline in the process. The technical team, however, is empowered with the supervision process and instruments and there were good results coming from the supervised districts. Many problems were resolved, but on-going follow up is necessary to continue to improve.

Quiché

The area's supervision to all the districts was conducted on two occasions and a third time is going on this year, with defined priorities. It is difficult, however, to consolidate information as well as to envision a global supervision process for all of the Quiche districts.

Supervision teams were formed in Quiche, the number of personnel to be supervised was estimated according to specialty, and goals for performance supervision of IMCI by teams were set.

As a result of the supervision activities, problems related to medicine supply and lack of personnel were detected. Supervision and monitoring of the components are considered a priority for 2004.

A challenge for supervision is to continue to motivate USME supervisors to promote supervision-facilitation activities. If they are not continually stimulated, the supervision system may not be applied.

For the rest of the areas of the Agreement, the status was as follows:

The DAS argue that the lack of resources (vehicles, fuel, and per diem) means they cannot carry out the supervision-facilitation activities frequently. Supervision activities have been implemented but only when problems existed; however, activities are important not only to resolve problems, but also to prevent them. From the districts to the health posts supervision is not carried out systematically due to lack of empowerment of responsible personnel. It hinges on the municipal coordinator leadership.

The technical team does not yet apply the supervision instruments systematically. Some team members are able to manage the check list and the *matriz* well, but not all. Immunization coverage is a priority and supervision efforts

are focused on this type of coverage. In extension of coverage, the tendency is to review the management of resources by the NGOs.

The advancement of supervision in the DAS has been uneven. For example, in areas that are not part of the Agreement, including Guatemala, Sacatepéquez, Petén (the 3 areas), Escuintla and Zacapa, according to USME, supervisors have been able to implement supervision activities on a regular basis. In the last quarter, Suchitepéquez and Retalhuleu received constant support by the USME for carrying out supervision activities from the area to the district level. In contrast, the remaining areas showed weak implementation of the system in 2003.

In the annual evaluation meeting held by the USME team, highlighted was the need for more continued central level support in order to maintain motivation of the local teams, to develop supervision activities, as well as monitoring and quarterly evaluations. At this juncture, USME has developed a work plan that hopes to assure implementation of the system.

Community System

From the time of the initial supervision-facilitation system's design, USME has considered the development of a specific community level system. A proposal based on the AIEPI AINM-C strategy has been designed for application in the eight areas of the Agreement. This proposal includes:

The system's definition: The system has been defined for the verification of supplies, performance, and indicators of the AIEPI AINM-C strategy's application. The system looks to improve the supply of goods and MIC performance. Support for the development of the community personnel's technical competency for the prevention and health promotion is also a goal as is the follow up for personnel in the promotion of community participation for self help in health care. Through this proposal, the definition of who supervise whom is made, as well as the schedule for supervision, monitoring and evaluation; also the instruments to be used and the information that will be obtained from their application has been defined.

Indicators to be monitored: A list of indicators to be monitored periodically has been devised as well as how the information will be obtained and how consolidation and analysis will take place. The indicators refer to the following processes: a) input indicators: trained human resources, availability of basic materials and medicines for the MIC application, basic materials availability for the Promotion and Prevention application, community participation; b) process indicators: MIC reported application, reported application of Promotion and Prevention, MIC performance monitoring, promotion and prevention performance monitoring, community participation; c) result indicators MIC and PP (growth monitoring).

Instrument development: Monitoring and supervision instruments have been developed for the integrated case management, and promotion and prevention components. The integrated case management instruments are the following: 1) checklist for the MIC training, 2) verifying of medicines and basic equipment instruments 3) community monitoring sheet 1-6 (MIC to MA and FC performance monitoring). The promotion and prevention instruments developed are the following: 1) monitoring and supervision of the institutional facilitator, 2) monitoring of the performance level of community facilitators evaluated by institutional facilitators 3) checklist of monthly growth monitoring and promotion sessions, 4) *vigilante de salud* 's notebook review instrument, 5) Checklist for *sala situacional* 6) checklist for *sala situacional* analysis, 7) monitoring of the performance level of *Vigilantes de salud* evaluated by community facilitators. Other instruments have also been designed for use with all the other supervision, monitoring and evaluation for MIC and PP, including a questions guide and an analysis and solution's *matriz*. UPS-1 designed a supervision instrument that needs to be tested for NGOs.

Preliminary System's Test

Field-testing of the system before its implementation was thought important in order to identify improvement opportunities and make necessary modifications. This is considered a preliminary test that allowed, in principle, to see if the instruments achieve their purpose, if it is possible to obtain the needed information from this system, and to determine the difficulties of applying the instruments. The process consisted of testing the AIEPI AINM-C

Monitoring and Supervision instruments in its two components, integrated case management (MIC) and promotion and prevention (PP), as well as the Community Participation component.

Testing was done in Quetzaltenango with previously selected health districts willing to participate. 4 NGOs, 4 Community Centers and 3 growth monitoring and promotion sessions were visited. During these visits the monitoring and supervision instruments were applied, the information obtained was subsequently analyzed, and improvement opportunities noted.

The main findings include the need to improve forms, such as unifying codes used in all the instruments, as well as the establishment of the same format for data.

Although the system's testing allowed for observation during care being provided to patients, it was noted that there are no registration sheets available, and that several of the observers were new personnel that had not received training, and therefore did not apply the strategy. The tutorial process following the training as well as the supervision, monitoring and evaluation processes should be directed by the Extension of Coverage coordinator of each health area. The coordinator should team up with the *gestor* or rural health district advisor responsible for supervising the PEC NGOs and the area's institutional facilitators.

Table 35 - Overview of activities developed during testing and its participants

Date	NGO	Community Center	Observed Processes	Personnel Assisting	Testing Participants
Dec.02	ADIS	Más Adentro, Génova Costa Cuca	Interview with FC only	FC Mario Pérez	Lisandro Misael Cifuentes Encargado de Extensión de Cobertura DAS Ruth de Arango CS Claudia Flores CS
Dec.03	Red Cross	El Horizonte, el Palmar	Consultation, Growth Monitoring and Promotion	MA Carola Camey FI Francisco Pixcar FC Cornelio Pacheco VS Demerisi López	Angélica Bixcul CS Karla Hernández UE
Dec.03	FUNDATEC	Huitancito, Cabricán	Consultation, Growth Monitoring and Promotion	FI Oscar López FC Andrés Velázquez	Neftaly Ixmay Gestor Centro de Salud Ruth de Arango CS Claudia Flores CS
Dec.03	APICS	Choquí Alto	Consultation, Growth Monitoring and Promotion	MA Alba Rosmary Pérez FI Hector Lários FC Nicolás Xec FC Hermelinda Cux VS Rosario Isabel Xec	Angélica Bixcul CS Karla Hernández UE

Database

A database is needed to consolidate supervision-related information recorded in the health areas and USME. The basic design has been developed, but not tested and implemented. The starting point was the training of USME personnel in Excel in order to use a simple spreadsheet. The spreadsheet exists but since supervision activities were not conducted in December, this spreadsheet will be tested in January 2004.

Limitations

In 2003, the supervision system advanced slowly due to activities assigned to the USME team that were not within their work plan. The principal activity to which USME dedicated lots of time was the organization, development and follow up of the URGE strategy implemented by the SIAS direction in 2003.

Although performance problems are usually resolved, at the local level there is insufficient support, such as transportation, per diem, and resources to solve infrastructure problems, (i.e. lack of running water at the health post).

Many of the problems identified by local teams are related to the lack of human resources. Unfortunately this problem has no evident solution. This chronic sector problem needs to be confronted by MSPAS higher authorities. Local teams lose motivation when in spite of proving their need for human resources (and with vacant job positions) the responsible authorities do not appoint the needed personnel.

2.3.5. Financial Management and Administration Results

Results

During 2003, *Calidad en Salud* and the *Unidad Ejecutora*, facilitated the allocation and execution of government funds in order to further implement health actions that benefit the population. They also strengthened the application of financial and administrative norms and procedures, both by the *Unidad Ejecutora,* and the eight priority Health Areas, in order to achieve efficiency and effectiveness in the use and management of financial resources (counterpart funds), and to ensure compliance with the objectives of the Agreement.

Internal control processes complemented the activities already mentioned, as a mechanism to regulate execution of counterpart funds, ensuring that if certain actions were not adequate, corrective measures were taken quickly and timely.

With *Calidad en Salud's* support, the *Unidad Ejecutora* improved its registration of budgetary and financial information of counterpart funds for the eight Health Areas and for the *UE* itself.

Objectives of the administrative and financial component

The objectives of the financial management and administration component for 2003 were as follows:

- Provide technical support to staff of the *Unidad Ejecutora*, the MSPAS and the eight priority Health Areas of the Agreement, in order to ensure compliance with the norms and procedures related to administrative and financial processes and the management of government counterpart funds
- Facilitate the development and implementation of an accounting system for the registration and control of counterpart funds
- Monitor administrative and financial interventions, at central and area levels, in conjunction with the UNDP

Results

Interventions implemented to fulfill these objectives are described below.

Financial Management

With support from *Calidad en Salud*, the MSPAS spent Q8,274,611 in payments made to the UNDP for the agreement 520-0428; another Q841,736.63 and Q661,276 were spent on the purchase of contraceptive methods from the UNFPA.

Budget regularization of donated funds before the Public Finance Ministry was in the amount of Q19,091 million, corresponding to 2003.

Supervision and Monitoring

While reviewing the documentation for the *Unidad Ejecutora* and the eight priority Health Areas that support the purchase of goods and services with counterpart funds using different methods (petty cash, rotating funds and payment through administrative action), considerable gains were observed in procedure application. Improvement is needed, however, in: 1) technical specifications, 2) the comparative charts of technical specifications required and 3) complying with the steps for each purchase. Recommendations for process improvements were provided.

Calidad en Salud contributed to:

- Conducting integral process follow up
- Verifying that planned activities are carried out in a timely manner
- Ensuring that supplies for activities be on hand and applied correctly, effectively and in a timely manner
- Improving recording and control of fixed assets, supplies, fuel and vehicles

The following table shows the execution of counterpart funds by the eight Health Areas and the *Unidad Ejecutora* through petty cash, revolving funds and payments through administrative action, during 2003.

Table 36 - Execution of Counterpart Funds for 2003 (amount in Quetzales).

	Budgeted	Executed	% Executed
Ixil	284,591.00	543,683.23	191.04
Huehuetenango	694,728.00	775,037.10	111.56
Chimaltenango	722,969.00	516,639.15	71.46
Quiché	462,019.00	942,768.36	204.05
San Marcos	1,427,825.00	1,149,119.47	80.48
Solola	520,401.00	592,084.07	113.77
Totonicapán	610,872.00	210,111.50	34.40
Quetzaltenango	1,146,758.00	1,103,141.33	96.20
Unidad Ejecutora	2,515,784.00	3,725,260.47	148.08
Totals	8,385,947.00	9,557,844.68	113.97

Execution for the four years of the Agreement represents a substantial improvement, as can be observed in the table below.

Table 37 - Execution of Counterpart Funds from the Year 2000 to September of 2003 (amount in US dollars).

	2000-2001 Administration MSPAS	2001 Administration UNDP	2002 Administration UNDP	To September 2003, Administration UNDP	Totals
8 Health Areas	517,935.24	42,029.40	1,307,352.97	1,350,964.17	3,218,281.78
Unidad Ejecutora	152,930.38	67,420.28	515,756.39	344,831.02	1,080,938.07
Totals	670,865.62	109,449.68	1,823,109.36	1,695,795.19	4,299,219.85

Source: Report from June 1 to September 30, 2003, sent by *Unidad Ejecutora* to USAID.

Coordination

Calidad en Salud and the UE held meetings with staff from the UNDP, MSPAS/USME, and UDAF partner projects and the Health Areas for:

- Planning, programming and coordinating technical, administrative and financial activities
- Evaluating interventions, and analyzing problems and constraints on budget and financial execution
- Improving the procurement of goods and services

Information regarding the technical and financial progress of the Agreement was presented to staff from the Public Finance Ministry (*Dirección de Crédito Público, Dirección Técnica del Presupuesto, Dirección de Contabilidad del Estado*), MSPAS (*Planificación Estratégica, Departamentos Financiero y Presupuesto*), USAID, SEGEPLAN, *Calidad en Salud* and the *Unidad Ejecutora*.

Training

During 2003 *Calidad en Salud* carried out activities oriented to improve the quality of the financial and budgetary execution of counterpart funds. To that end, training and tutorials were conducted for technical personnel and administrative-financial staff from the *Unidad Ejecutora* and the eight Health Areas. The trained staff are responsible for managing the different methods of contracting of goods and services, for recording fixed assets, fuel management, warehouse management, and using and maintaining vehicles and equipment. There were information and orientation activities for said personnel in order to update and provide them with feedback on norms and procedures, (petty cash, revolving funds and payments by administrative action), as well as internal and budgetary controls. These actions took place in order to improve performance and create the basis for developing a culture of excellence.

Management personnel from the *Unidad Ejecutora* and the *Programa Nacional de Salud Reproductiva* (PNSR), received training in the Accounting Information System's software used to record and control counterpart funds.

Other activities

Within the framework of the UNDP, support was given to develop, modify and transfer the counterpart funds budget for the *Unidad Ejecutora* and the eight Health Areas.

Calidad en Salud supported the *Unidad Ejecutora* and the *Programa Nacional de Salud Reproductiva* in the normative technical aspects to design and develop the Intranet. Additional support was provided in the following areas:

- Elaboration process for technical specifications, estimate bidding, evaluation, allocation, account coding and installation of the Accounting System's software to record and control counterpart funds by the *Unidad Ejecutora* and the eight Health Areas
- Purchase and delivery of computer, audiovisual, promotional, *cadena de frío*, medical and hospital equipment
- Elaboration of the MSPAS report and the presentation given at the Public Investment System Seminar emphasizing budget evaluation
- Elaboration of a document containing the human resources proposal to strengthen the PNSR, for the 26 Health Areas
- Proposals for the preliminary 2004 budget for the PNSR
- Internal Auditing Follow Up Plan for counterpart funds
- Financial reports presented to USAID, MSPAS (International Cooperation and Finance Area)
- Terms of reference for contracting an external audit for each of the eight Health Areas and the UE

Support to *Unidad Ejecutora* to hire staff with counterpart funds, as follows: a Specialist in IMCI and a financial director for the central level, and a 1st.-level facilitator for the Quiche and Ixil Health Areas and three auxiliary administrative-financial staff to provide support, for the above mentioned Health Areas and Huehuetenango.

Limitations

The Accounting System Software was installed at the *Unidad Ejecutora* and the financial management personnel from the UE and the PNSR were trained in the software, yet it was not possible to code and enter the information on the execution of counterpart funds from September 2000 to the present.

The Accounting System was not installed in the health areas and personnel were not trained in the system.

At the level of the Health Areas only four 1st-evel facilitators and three auxiliary administrative-financial staff were hired to attend to the needs of the eight health areas, when what is really needed are one 1st- level facilitator and one auxiliary administrative-financial staff per health area.

2.4. Result 4: Greater Community Participation and Empowerment

2.4.1. Community Participation Sub-component Results

Result 4 focuses on "greater community participation and empowerment". The objectives of this result are to increase community responsibility in the improvement of health care services and support for positive change in household level health practices. Greater community participation (CP) has been achieved during 2003 through the

implementation of AIEPI AINM-C and specifically, the following strategies: a) direct support for community health care personnel and other community agents training in basic social management and community participation within AIEPI AINM-C's Promotion and Prevention Module 1; and b) expansion of improved community-level training processes that had already been implemented[11].

In order to achieve *Calidad en Salud*'s objectives under Result 4, the following activities were carried out in 2003:

- Documentation of the training and implementation of the community participation methodology in four Chimaltenango communities
- Specific training in the community participation methodology in Ixil, Huehuetenango and San Marcos
- Training of 10,735 VS, 808 FC, 168 FI, 173 MA, and 65 community *gestores* in the community participation methodology, included in the first module of the AIEPI AINM-C Promotion and Prevention component
- Coordination with UPS-1, PROEDUSA, JHPIEGO and the UNFPA for the development and implementation of a follow-up plan in community participation as part of the AIEPI AINM-C strategy
- Coordination with a rural health technicians training institute - *Instituto de Adiestramiento de Personal de Salud* (INDAPS)- to follow up on community participation in Chimaltenango
- Training of institutional health personnel from Alta Verapaz and NGOs (MERCY CORPS, PCI, Share, CARE, Plan International and CRS) in the four steps of the community participation methodology, as part of the expansion of the AIEPI AINM-C strategy
- Official adoption, printing and distribution of 1,000 manuals on the community *"Metodología para la Participación Comunitaria en el Primer Nivel de Atención de los Servicios de Salud"* and its annex "*Guía para Elaborar la Sala situacional Comunitaria*"
- Definition of the trace indicators for community participation as part of the AIEPI AINM-C monitoring and supervision system
- Design and development of the monitoring and supervision instruments of the community participation component, as part of the AIEPI AINM-C monitoring and supervision system
- Monitoring of the implementation of growth monitoring and promotion and summary information to identify communities at risk that should complete the cycle of community participation (analysis and action plan) to improve growth of children
- Monitoring of the community *sala situacional* in five health areas: Sololá, Quiché, Totonicapán, San Marcos and Chimaltenango

Documentation

In the first quarter of 2003, the documentation for the training and implementation of the community participation methodology was carried out in four "success cases" in Chimaltenango: Pacoxpón, Manzanillo, Xenimaquim and Xeabaj. The objectives were to: a) document and analyze the training and implementation process of the community participation methodology at the primary care level, in the priority areas with an emphasis on Chimaltenango; and b) recommend actions to strengthen the community participation methodology's implementation within the AIEPI AINM-C strategy. The results of this documentation were subsequently used in the expansion of the CP methodology within AIEPI AINM-C described above. These results were:

[11] Community Participation Strategic Plan

Training for the Community Participation Methodology was considered effective since with the technique that was utilized, "*árbol de problemas*" or problem tree, was understood by 95 percent of the rural community leaders who easily identified root causes (roots of the tree) and consequences (leaves of the tree) of the problems prioritized by the communities.

There was less follow up in the last two stages of the Community Participation Methodology –development and implementation of a plan of action- than to the beginning stages; but in three out of four communities it was reported that decisions had been made and activities had been carried out to solve priority health problems.

One hundred percent of the community personnel thought the presentation and analysis of the *sala situacional* data was key in the methodology since it involved the community leaders in the discussion and solution of health problems.

The following factors contributed to the success in the Community Participation methodology's application in four communities in Chimaltenango:

Basic health teams made plans to modify and analyze the *sala situacional*, together with community authorities and leaders.

FI and MA provided guidance for the VS and FC in the development and creative presentation of the community *sala situacional*, using drawings and cut out figures.

Presentations and analysis of the *sala situacional* were carried out, in the language spoken in the community, by the VS and FC.

The Extension of Coverage coordinator had a positive attitude in providing direct support to the FI who, in turn, supported theVS and FC in the implementation of the Community Participation.

Financial support for training at all levels was provided from the institutional to the community level.

The Health Area plan of action identified the resources necessary to train, monitor, develop, implement and analyze the community *sala situacional*.

The documentation yielded the following recommendations:

1. The community participation methodology within the AIEPI AINM-C strategy Promotion and Prevention component requires close follow up from the Health District, NGOs, MA and FIs
2. Support material for the community personnel such as a guide for the development of the *sala situacional* with specific charts needs to be developed.
3. Monitoring indicators for the community participation activities need to be defined and included in the national health information system (SIGSA).
4. Community personnel (FC and *Vigilantes*) need to be empowered through training, tutorials and facilitating supervision since they are the community leaders, ultimately responsible for health in the community.
5. The community *sala situacional* needs to be presented by the basic health team and analyzed together with community leaders and representative at least once at the beginning of the year. Communities need some external assistance to develop local action plans and follow up for implementation.

Of these recommendations, four have already been taken into consideration in the expansion of the AIEPI AINM-C community participation component. As described below, the guide has been developed and produced, monitoring indicators and instruments have been defined, and there have been tutorial/ supervision experiences in the San Marcos OR and Chimaltenango. Specific strategies to provide follow up to the community participation component, however, have not been established. In order for the community activities to be better monitored, for example, the FI should have a calendar of monitoring/ supervision visits to each community center in their jurisdiction, and the FC should have a calendar to visit each VS. During those visits they should follow monitoring and supervision guidelines and instruments and summarize the information collected in order to take decisions. In addition, community health personnel and the health committees need to be trained in development of plans of actions and follow up with government institution and NGOs for implementation of interventions contained in those plans.

Coordination and planning

Based on the documentation described above, a follow up plan was defined by the Community Participation component with MSPAS counterparts and the AIEPI AINM-C team. At the end of 2003, a meetings was held with the AIEPI AINM-C team to evaluate the completion of the community participation follow-up plan. It was estimated that 50 percent of the plan had been completed; other results were as presented in Table 37.

Table 38 - Activities in the CP follow up plan and degree of completion

Activities	Level of completion
Revision and printing of the CP Manual	100%
Distribution of the CP Manual	50%
Official adoption of the CP methodology	100%
Definition of community participation indicators	100%
Design of CP monitoring and supervision instruments (2)	100%
Pre-testing of monitoring and supervision instruments	50%
Definition and development of CP guidelines for 2004	100%

Calidad en Salud coordinated with a group of rural health technician practitioners from INDAPS (*Instituto de Adiestramiento de Personal de Salud*) to offer tutorials to 164 VS and 26 FC in community centers in Chimaltenango. The focus of the tutorial was growth monitoring and promotion of children under two. The practitioners also took advantage of the tutorials to assist the basic health teams in the development of the community *sala situacional* in 25 community centers. INDAPS practitioners, with technical support of *Calidad en Salud,* also were able to present and analyze the data in the *sala situacional* in 13 of 25 communities. Two instruments (checklists) to monitor the community *sala situacional* (its physical set up, and its presentation and analysis) were developed and tested in order to evaluate how well it was being implemented in these community centers. Results are presented below under monitoring.

Training in Community Participation

The following table shows the numbers of personnel trained in the four community participation methodology steps.

Table 39 - Number and types of personnel trained in the CP methodology

AREA	ACTIVITY	TSR	EA	FI	FC	MD	EP	Others	Total
Huehuetenango, Ixil and Chimaltenango	Training in the Four CP Methodology Steps	2	6	17	10			28	63
San Marcos (operations research)	Training in the first step of CP Methodology	4		4					8
San Marcos (operations research)	Strengthening in growth chart graph and community *sala situacional* analysis	3	3	3	29			1	39
Alta Verapaz , AID partner and non partner NGOs.	Training in the four steps of the CP Methodology	7	10	9		7	13	26	72
	Total	16	19	33	39	7	13	55	182

Additionally, 10,735 VS, 808 FC, 168 FI, 173 MA, 65 community *gestores* and 8 TS, were trained in the four steps of the community participation methodology, as part of training in Module I of AIEPI AINM-C Promotion and Prevention component.

Materials

A total of 1,000 manuals of the CP methodology "*Metodología para la Participación Comunitaria en el Primer Nivel de Atención*" and its annex "*Guía para elaborar la Sala situacional Comunitaria*" were printed. They have been delivered by the UPS-1 to the 20 Health Areas implementing the Extension of Coverage process or PEC. The material will be distributed to institutional facilitators (FI) and community *gestores* in those Health Areas once the PEC NGOs are certified by UPS1 to continue providing services in 2004.

The technical teams at the central level such as UPS-1, *Unidad Ejecutora, Calidad en Salud*, PROEDUSA, USAID, Mercy Corps and other institutions such as the European Union also received the community participation manuals. The CP methodology and manual was also shared with NICASALUD, an association of NGOs from Nicaragua, who visited the country in 2003 in order to observe the implementation of AIEPI AINM-C. UPS-1 has separated 467 manuals that will be distributed to the new government's Ministry of Health personnel in 2004.

In 2004, it is hoped that financial support from the *Unidad Ejecutora* will be obtained to print 1,500 additional copies of the guide for the development of the situational room (annex), and distribute them to the 1,331 community centers located in the eight priority Health Areas.

Monitoring and Supervision

Regular monthly meetings were held with the AIEPI AINM-C team throughout 2003 to review trace indicators. As a result of these working meetings, two indicators for the community participation component were officially incorporated into the information system: 1) percentage of community centers by jurisdiction that have a *sala situacional* and, 2) percentage of communities by jurisdiction that have analyzed the situational room data and have drafted a local plan of action.

Two monitoring and supervision instruments were designed and pre-tested for the collection of monitoring and supervision data, specifically related to the implementation of *sala situacional* in the DAS, Health Districts and the NGOs and corresponding to the two above-mentioned indicators. These instruments are: 1) a check list to verify key elements of the physical set up of the *sala situacional* and 2) a check list for the presentation and analysis of the community *sala situacional* data and drafting of local plans of action.

Using these instruments the community *sala situacional* in 16 community centers from Sololá, Quiché, Totonicapán and San Marcos were monitored. In Chimaltenango, a more extensive study was conducted in 25 community centers, with support from the INDAPS rural health technician practitioners, who were responsible for assisting in the development of the community *sala situacional*. Although the selected community centers do not represent all community centers under Coverage Extension in the priority Health Areas, the results illustrate the difficulties associated with implementing a communtiy *sala situacional*.

Table 40 - Percentages of community centers with each element of the *sala situacional*

No	Selected elements of the *Sala situacional*	CCs from four areas (n=16)	CCs in Chimaltenango (n=25)
1.	Community map	93	100
2.	Total population by community and age groups	81	100
3	Current child immunization data	81	100
4	Growth monitoring data (weight of children less than 2 years)	19*	100
5	Prenatal care data for pregnant women	62	100
6	Tetanus Toxoide immunization data for women from 15 to 49 years	62	100
7	New family planning users data by month	19*	0
8	Postpartum care data	56	100
9	Monthly birth data	25	100
10	Illnesses of children younger than 5 data	44	100
11	Pregnancy related complications data (pregnancy, delivery and post-partum)	31	100
12	Causes of infant and child mortality data	31	100
13	Causes of maternal mortality data	31	100
14	Out-migration data	38	100
15	Immigration data	38	100
16	Home water supply source data	62	100
17	Human waste disposal from the home data	62	92
18	Home garbage waste disposal data	62	92
19	Other complementary data		
	Community Personnel	69	60
	Key actors	50	60
	Organizations	38	56
	Means of transportation	0	52
	Means of communication	0	56
20	The *sala situacional* data has ever been analyzed with the community or key actors	31	52
21	Have minutes of the (last) *sala situacional* analysis	19	52
22	Can show the minutes from the (last) *sala situacional* analysis	12	52
23	Have a written local plan of action	0	36
24	Can show the written local plan of action	0	36

* San Marcos Operations Research

Percentages are much higher for community centers in Chimaltenango than for those in the other four Health Areas, which underscores the importance of technical assistance and supervision in the implementation of the CP component. As mentioned, in Chimaltenango TSR practitioners provided the basic health teams with such facilitation. The lowest percentages are found in the analysis of the *sala situacional* data and the development of plans of action, which highlights the difficulties in completing the community participation cycle, already observed in the documentation of "success cases". It is easier to present the data, than to analyze it and formulate plans of action based on such analysis. It will be even more difficult to have plans of action implemented and monitored, the final step in the cycle, which was still not considered in this monitoring exercise.

In addition, only 19 percent of the community centers from the four areas had data on the number of new family planning users, while none had them in Chimaltenango. Community centers with family planning data are participating in the operations research being conducted in San Marcos, which has more supervision and emphasized the implementation of all services included in AIEPI AINM-C. In the community centers in Chimaltenango, there was no data regarding new family planning users because when the "guide for developing the community *sala situacional*" was first introduced, these data had not been considered. For the document's next printing, however, a chart with the number of family planning new users each month has been included.

Monitoring of community centers has demonstrated an urgent need to strengthen the capacity of community (VS and FC) and institutional personnel (FI) in order to support the *sala situacional's* analysis, develop and implement local action plans.

Additionally, it was discovered that three community centers receive from the NGO funds, which are managed by the health committees from the community. The funds are used to pay for the rent of the locale of the community center, purchase furniture, transportation of medicines and supplies, and transportation in the case of an emergency. NGOs in charge of health services in these communities have allocated the funds to the communities themselves as part of their commitment to promote community participation. This is an innovation worth sharing with UPS1 and NGOs under the Coverage Extension model.

Institutionalization

During 2003, the community participation methodology was officialized, within the Extension of Coverage model process at the national level. The community participation indicators were included in an electronic spreadsheet to be evaluated by UPS-1 as a criterion to certify NGOs in Extension of Coverage . This spreadsheet also requests that 80 percent of the community centers have a *sala situacional* and that 10 percent of the communities by jurisdiction have local plans of action.

As part of the institutionalization of the AIEPI AINM-C strategy, a follow up plan for community participation and guidelines specifying activities to be programmed and resources to be allotted to CP in the coming year have been developed and will be included in the 2004 POA, both at central level and at the Health Area level.

Limitations

The community participation methodology's officialization was completed by the end of 2003; however, at the moment, the CP methodology manual has not been delivered to the FI and *gestores* (managers) in 20 Health Areas. The decision of UPS-1 was to distribute them in January 2004.

The community participation budget is very limited, which means additional funds need to be obtained to provide refresher training and supervision to FI and community *gestores*, in order for them to support the implementation of the 4-step Community Participation methodology.

The community personnel and health committees already established have little technical and management support to develop plans of action and carry out community interventions.

2.4.2. AIEPI AINM-C Promotion and Prevention Component Results

- Community Members Actively Participate in Decision-making Concerning MCH Programs
- Greater Community Control Over Factors that Determine Health Status

The Promotion and Prevention component of the AIEPI AINM-C strategy has been designed to strengthen the extension of coverage process in the eight priority health areas established under Agreement 520-0428. The strategy is intricately tied to both Results 2 and 4, through the community facilitators' and the *Vigilantes de salud's* participation in the provision of services in the community and a focus on behavior change at the individual and household level.

During the current year, financial and technical assistance was given to the MSPAS to review and modify the national growth monitoring and promotion norms, based on operation research conducted in the Ixil Triangle.

Training materials (methodology guides) were also developed and reproduced and the IEC materials (counseling cards, child health carnets, *vigilante*'s notebooks, reference bulletins and family planning pamphlets), destined for community personnel, were distributed to the eight priority health areas. (See Result 2 for additional details.) .

Technical assistance was also given to the MSPAS for the organization and capacity building of the training teams at the central, area, health district and NGO level, as a structural base for the strategy's implementation. Follow up training was provided for the trainers in the eight health areas through the use of tutorials. The basic health team (EBS) received support, with a focus on improving the performance of the *Vigilantes de salud* when implementing the growth monitoring and promotion weighing sessions at the community level.

Trainers and other health care personnel involved in the San Marcos operations research project received technical support in the implementation of the experimental extension of coverage model focused on populations assigned to health posts. The same training methodology used under the NGO model was used with the *Vigilantes de salud* in the communities participating in the research, using the same package of IEC/BCC materials for the Promotion and Prevention component of the AIEPI AINM-C strategy. There also was coordination with the AID partner and non-partner NGOs and cooperating agencies to expand the implementation of the strategy to other health areas at the national level. Key institutional personnel were trained to manage the implementation of the strategy.

Over the course of the year, a total of 10,735 *Vigilantes de salud* were trained in growth monitoring and promotion (module I), 10,448 in preventable diseases (module II) and 8,644 in maternal care and family planning (module III). Training was also conducted in the following areas: the management of the AIEPI AINM-C strategy (55 multidisciplinary participants); the monitoring and supervision system (65 participants); supervision-facilitation (33 participants); and operations research in the AIEPI AINM-C strategy in San Marcos (42 participants).

During the last quarter of 2003, the strategy's indicators were reviewed and prioritized and the goal for each was defined. The preliminary testing for the supervision and monitoring performance instrument was also conducted, following its review by representatives of UPS-1, the national technical coordinator and representatives from the *Unidad Ejecutora.*

Institutionalization

Institutional personnel were supported in the transfer of methods, techniques, tools and job aids to allow for training and provision of services to the community.

The review, adaptation and officialization of the growth monitoring and promotion norm for children younger than 2 was also carried out during 2003. The norm includes: a) Use of the minimum expected weight gain table for all children under one and monthly growth monitoring and promotion sessions for all children under two that can now be conducted by *Vigilantes de salud*.

Support was also given to establish operational technical teams at the central, area and district levels and with MSPAS partner NGOs to plan, execute, supervise, monitor and evaluate the AIEPI AINM-C strategy.

Indicators for exclusive breastfeeding, adequate growth and micronutrient registration were incorporated into the SIGSA forms. Also, all the activities programmed and developed have been directed by key personnel from the MSPAS from the beginning, and by the Ministry of Health, greatly promoting the institutionalization of these programs and activities.

Planning and Coordination

Calidad en Salud offered the MSPAS technical assistance to plan and coordinate activities, along with the SIAS General Directorate, the *Programa Nacional de Salud Reproductiva* (PNSR), the Department for the Regulation of Health Care Programs, the USME, the UE, PROEDUSA, UPS-1, PROSAN, PNI, and IRA diarrheas and vectors Programs. Also supported were AID partner NGOs such as CARE, SHARE, SAVE THE CHILDREN, CRS, Pro Redes Salud, JHPIEGO and others such as Plan International, the Guatemalan Red Cross, PCI and Mercy Corps.

The planning and coordination meetings focused on the following: a) review and update of the growth monitoring and promotion norms; b) design and development of IEC materials and the training manuals for community personnel; c) training of human resources from the MSPAS, NGOs and cooperating agencies; d) strategy management workshops for induction strategy of other NGOs, IGSS and cooperating agencies in the strategy; e)

review and definition of the monitoring and supervision system for the community level, and f) review and definition of indicators and goals.

During the last quarter, in coordination with the European Union Project, FESIRGUA, and the CURAMERICAS network of NGOs, meetings and a workshop were held to explain the AIEPI AINM-C strategy and its tools.

Development of IEC materials

During the current year, *Calidad en Salud* supported the design and development of the community personnel training manual, in coordination with UPS-1 technical personnel, the technical coordinator, of the strategy the PNSR counterpart and the UE. The manual was developed with an adult education focus, and contains tools such as: job aids, *dibujos generadores*, interactive exercises, visual aids models and support texts, following the guidelines recommended by JHPIEGO Consultant Amelia Kaufman. The validation of the manual was carried out in the San Marcos health area with the participation of eight Rural Health Technicians (TSR), eight individuals from the area's technical team and three central level (UPS-1, UE and CS) technical personnel. The manual was tested by training 20 *Vigilantes de Salud* from the Choantonio village in Chimaltenango.

This activity was developed with participation from the PNSR and the *UE*'s personnel. The most important suggestion presented were the strengthening of the methodology with techniques focused on practical rather than theoretical content, taking into account the *Vigilantes de salud's* education level and the time constraints to complete training.

The technical review of the counseling cards, organized in three modules, was also conducted. Module I corresponds to the growth monitoring and promotion norm, module II relates to prevalent childhood diseases and module III is for family planning and maternal care. (See Result 2 for additional details.)

400 of the above mentioned manuals were financed by the *UE* with counterpart funds at the central level. In coordination with UPS-1, IEC, Print Studio, and the directors and management from *Calidad en Salud*, the delivery strategy for the 400 community training manuals and 13,000 packets of IEC materials for the eight areas of the Agreement was defined.

Training

For the year 2003, capacity building for trainers from the central level, health areas, health districts and NGOs were conducted. The main purpose of the capacity building was to develop the technical competencies of trainers in the following areas: a) adult education, b) basic interpersonal communication aspects, c) counseling techniques, d) use of the *laminas* as counseling tools, e) listing of children younger than 2, f) use of the *carne unico*, g) reference sheets and h) reminders for the families.

With technical support from *Calidad en Salud*, 17 individuals from the central and operation levels from CRS, SHARE, CARE and SAVE THE CHILDREN, (USAID partner NGOs), 11 individuals from the central level from IGSS, and 15 individuals from CRS (USAID partner NGOs) were trained on how to expand the implementation of the strategy.

Workshops to increase the capacity of health area trainers also were developed. Special emphasis of the capacity building was on the use of the methodology's guide for training community personnel (VS and FC), in the tools of the minimum expected weight gain table (MEW, diagram review, vigilante notebook) and the *carnet único* that contains the registration of micronutrients, immunizations and anti-parasitic medication.

The health area training teams replicated this training with: 3 district doctors, 2 professional nurses, 13 nursing auxiliaries, 8 social workers, 65 rural health technicians or municipal health *gestores*, 173 ambulatory doctors, 168 institutional facilitators, 18 community facilitators and 87 individuals from other disciplines (administrative, management and decision makers from the MSPAS partner NGOs).

As follow up of the training, the central level personnel (UPS-1, UNSR, UE and *Calidad en Salud*) provided tutorials to 100% of the training teams from the health areas, in order to strengthen their technical competency as trainers.

Calidad en Salud also participated in the development of supervision-facilitation training and monitoring tutorials for personnel from the eight health areas to teach them how to use instruments to improve the performance of basic health teams for the provision of services, and to better monitor indicators. Thirty-six individuals attended the first workshop, (from the Quetzaltenango, San Marcos, Huehuetenango and Totonicapán areas). In the second workshop there were 29 participants from the Chimaltenango, Sololá, Quiché and Ixil areas.

In order to strengthen and improve the delivery of health services 33 members from the health area training teams were trained in the supervision-facilitation system at the community level.

Management workshops also were held for IGSS, and USAID partner and non-partner NGOs.

The following table gives an overview of the training conducted for personnel at the central level, health areas, MSPAS partner NGOs, IGSS , USAID partner NGOs and other NGOs, in the Promotion and Prevention component of the AIEPI AINM-C strategy.

Table 41 - Summary of Personnel Trained under Community Participation Component, Including AIEPI AINM-C Promotion and Prevention

Description of Activity	Dr.	Nurse	Aux. Nurse	TS	TSR o G	ISA	MA	FI	FC	VS	CAT	Adm	Other	TOTAL
PP/TOT	3	2	13	8	65	0	173	168	18	0	0	0	87	537
PP/PC Module I	0	0	0	0	0	0	0	0	808	10,735	0	0	0	11,543
PP/ Module II	0	0	0	0	0	0	0	0	801	10,448	0	0	0	11,249
PP/ ModuleIII	0	0	0	0	0	0	0	0	777	8,644	0	0	0	9,421
Logistics Workshop	0	0	0	0	0	0	173	0	0	0	0	0	0	173
Monitoring and Supervision Workshop/TOT	14	4	1	18	16	1	0	1	0	0	0	5	5	65
Supervision-Facilitation Workshop	5	1	2	10	9	1	0	0	0	0	0	1	4	33
Management Workshops for AID partner and non partner NGOs	4	10	6	0	1	1	3	5	0	0	0	0	14	44
AIEPI AINM-C IGSS Introduction Workshop	5	1	0	2	0	0	0	0	0	0	0	0	3	11
PP/TOT IO/AEC/PS San Marcos	0	0	9	0	9	0	3	3	18	0	0	0	0	42

Implementation

During the third and fourth quarters of 2003, the following monthly growth monitoring and promotion sessions were held by the v*igilantes de salud* in eight health areas of the highlands.

Table 42 - Summary table showing results of monthly growth monitoring and promotion sessions

Health Area	Communities	VS	Children < two	Weighed	Classified	Grow Adequately	Does Not Grow Adequately	Does Not Grow Well with 2 controls	
								No.	% of them weighed
Chimaltenango	164	ND	4,188	3,312	3,142	2,727	415	86	2.5
Sololá	ND	ND	ND	ND	ND	ND	ND	ND	ND
Quiché	412	1,966	24,759	10,703	6,772	6,430	342	96	0.9
Ixil	ND	44	411	338	146	79	33	5	1.5
Totonicapán	ND	69	255	217	217	182	35	ND	ND
Huehuetenango	188	919	8,164	5,391	3,679	3,223	456	191	3.5
Quetzaltenango	92	447	3,725	3,370	3,212	2,788	424	104	4.2
San Marcos	106	189	6,629	5,612	5,301	4,312	915	250	4.4

Supervision, monitoring and evaluation

Calidad en Salud offered technical support to the technical director at the national level and to UPS-1 personnel to lead the work meetings with the PNSR, UE, USME, PROSAN, PROEDUSA, JHPIEGO, ProRedes Salud and the UNFPA. The purpose of the meetings was to review and strengthen the monitoring and supervision system at the community level.

In the health areas, training in the health districts has been monitored, using instruments to verify performance of trainers in an effort to guarantee the same quality of training is replicated at the community level.

During the last quarter of the year, *Calidad en Salud* participated in the tutorials for the *vigilante de salud* in order to improve performance for growth monitoring and promotion. Three specific skills were emphasized: weighing techniques, VS notebook recording and the counseling of mothers.

Technical support was also given to the MSPAS to review and develop goals and indicators for AIEPI AINM-C, and to design and validate the corresponding instruments for supervision, monitoring and evaluation. A field test was conducted in Quetzaltenango in December, to evaluate the functioning of the instruments.

Operations Research

Coordination and technical support was given to the Operations Research manager to support the Extension of Coverage model for Populations Assigned to the Health Posts in San Marcos, including the following activities: a) organization of training for basic health teams, b) capacity building of the training team in the use of the methodology's guide for training community personnel , c) development of didactic materials for the community facilitators and *Vigilantes de salud* 's training and d) tutorial monitoring for trainers of the San Antonio Sacatepequez and San Pablo districts.

Limitations

The development and distribution of the integrated set of AIEPI AINM-C IEC/BCC support materials was delayed in its final design and reproduction, associated with the consensus building process and lengthy reviews on the part of PROSAN, PNSR, UPS-1, as well as ProRedes Salud and JHPIEGO normative technical personnel. Comments and recommendations, which were sometimes contradictory, were not always received simultaneously.

The delays in the financial allocations for the SIAS NGOs responsible for managing basic health services, contracted by the MSPAS, have not allowed the completion of *vigilante's* trainings in some health areas.

The participation on the part of the UPS-1 personnel in the tutorials of the health area, districts and NGOs' training teams, was often limited due to lack of human, financial and transportation resources. Not withstanding, these Ministry personnel were able to actively participate in Chimaltenango and Sololá, supported by the *Unidad Ejecutora* with counterpart funds.

A lack of materials for the Huehuetenango, Quiché, Sololá and Ixil areas negatively affected the execution of planned activities.

Lack of personnel involvement in the tutorials, supervision and monitoring of the community facilitators and *Vigilantes de salud* in some health areas and districts caused delay in the execution of planned activities.

In some cases mothers request that their children not only be weighed, but that they be given food or medicines as well. This level of expectation has created some frustration for both providers and community members.

The lack of "incentive pay" for the volunteer *Vigilantes* creates frustration and often affects their enthusiasm for carrying out some of the tasks that they are responsible for. Lack of funds sometimes interferes with the *Vigilantes* participation in planned training activities.

During the growth monitoring sessions observed, the *Vigilantes* stated that the mothers would rather receive counseling in the privacy of their homes.

The rotation of basic health teams in some jurisdictions limits possible advancement and results in lack of continuity in the implementation of the strategy.

3. RESULT 5 IGSS: IMPROVED USE OF VARIOUS MATERNAL-CHILD HEALTH SERVICES PROVIDED BY IGSS

3.1. Sub – Result 1: More families use Maternal-Child Health Services

3.1.1. Family Planning Results

During 2003, technical assistance, training and logistical support activities continued in order to strengthen the access and use of family planning services, mainly in the implementation of the balanced counseling model in 100% of the assistance services, as a new concept that will allow users free and better informed decision making choices of contraceptive methods.

Also emphasized is the continued trainings, services tutorials, follow up to the offering of natural methods, and the consistent technical assistance and support of the family planning technical group, the *Gineco Obstetricia* and Dr. JJ Arévalo B Hospitals, as well as training centers for the Institute's human resources and other organization's personnel.

Indicators

During 2003, 30,432 new couples started using birth spacing, complying with 101% of the goal anticipated for the current year. Quarterly injectables continue to be the preferred method, followed by condoms and AQV-female

Table 43 – New Users - IGSS

FP Method	1Q	2Q	3Q	4Q	Total	Target	%	Mix
AMP	3,414	3,457	3,449	3.418	13,738	12,899	106.5	45.1%
Condom	1,414	1,586	1,326	1,312	5,638	5,197	108.5	18.5%
IUD	534	569	554	536	2,193	3,007	72.9	7.2%
Norplant	87	82	6	0	175	90	194.4	0.6%
Oral Contraceptives	541	613	671	639	2,464	2,649	93.0	8,1%
AQV-male	93	66	99	58	316	292	108,2	1.0%
AQV-female	1,191	1,262	1,372	1,448	5,273	4,997	105.5	17.3%
Naturales	133	101	191	210	635	869	73.1	2.1%
Total New Users	7,407	7,736	7,668	7,621	30,432	30,000	101.4	100%

The Female AQV-is the method that produces the greatest quantity of CYP, followed by quarterly injectables

Table 44 – CYP Production as per 2003 Target

FP Method	1Q	2Q	3Q	4Q	Total	Target	%	Mix
Depo Provera	5,624	5,475	5,297	5,002	21,398	21,573	99.2	21.2%
Condom	1,215	1,175	1,361	1,156	4,907	4,369	112.3	4.9%
IUD	1,869	1,992	1,939	1,876	7,676	10,525	72.9	7.6%
Norplant	305	287	21	0	613	315	194.6	0.6%
Oral Contraceptives	841	919	876	956	3,592	3,538	101.5	3.6%
AQV-male	1,023	726	1,089	638	3,476	3,212	108.2	3.5%
AQV-female	13,101	13,882	15,092	15,928	58,003	54,967	105.5	57.6%
Naturales	155	133	145	612	1,045	1,501	69.6	10%
Total CYP	24,133	24,589	25,820	26,168	100,710	100,000	100.7	100%

Table 45 - AQV-F Interventions

62.3% of the AQV-F are for post-partum or in-between pregnancies

AQV-female	1Q	2Q	3Q	4Q	Total	%
Cesárea	486	469	500	534	1,989	37.7
Post-Parto	532	612	694	714	2,552	48.4
Post-aborto	5	8	10	12	35	0.7
Intervalo	168	173	168	188	697	13.2
Total	1,191	1,262	1,372	1,448	5,273	100

Table 46 - Natural Family Planning (NFP) Methods

635 natural methods new users reported in 2003

Natural Methods	News Users				Total	APP	% APP
	1Q	2Q	3Q	4Q			
MELA	74	46	158	161	439	220	35.9
Collar	59	55	33	49	196	392	64.1
Otros	0	0	0	0	0	0	0
Total	133	101	191	210	635	612	100

Time of IUD insertion

Table 47 - Greatest quantify of IUD insertions are in between pregnancies 93%

Inserción IUD	News Users				Total	APP	% APP
	1Q	2Q	3Q	4Q			
Intervalo	534	535	498	480	2.047	7,165	93.3
Post parto	0	31	51	52	134	469	6.1
Post aborto	0	3	5	4	12	42	0.5
Total	534	569	554	536	2,193	7,676	100

Table 48 - IUD Insertion per Services Facility

The following table shows the hospitals and clinics where 2,193 IUD insertions took place.

Unit	Insertions IUD				Total	APP	%
	1Q	2Q	3Q	4Q			
Gineco Obstetricia	371	400	315	298	1,384	4,844	63.1
J.J. Arévalo	38	66	135	107	346	1.211	15.8
Periférica 5	54	27	40	39	160	560	7.3
Periférica 11	4	0	0	0	4	14	0.2
Escuintla	13	10	16	19	58	203	2.6
Mazatenango	5	29	11	21	66	231	3.0
Sacatepéquez	14	2	0	0	16	56	0.7
Santa Lucía Cotz.	4	7	3	5	19	67	0.9
Amatitlán	16	21	17	19	73	256	3.3
Otras unidades	15	7	17	28	67	235	3.1
Total	534	569	554	536	2,193	7,676	100

Monitoring and Performance Indicators

Support and technical assistance continued to be provided to the two training centers (*Gineco Obstetricia* and Dr. JJ Arévalo Hospitals) and nursing school students and resident doctors of the post graduate *Gineco Obstetricia* were trained in the counseling and family planning norms.

IGSS assists in an average of 30,000 hospital births per year, of which 92% occur in 4 hospitals [12] –*Gineco Obstetricia* - Dr. JJ Arévalo - Escuintla and Mazatenango Hospitals. The contraceptive use after partum, abortion or cesarean program was strengthened, which resulted in 66% of the women leaving the hospital centers with a contraceptive method. The most selected method being injectables for three months is 33%, the AQV-F with 17% and the condom with 11%. 36% leave without a method, because they did not return for consultation after giving birth, or because they did not have a spouse.

The established goal for offering of natural methods was surpassed. Currently there are 25 units that have trained personnel in the offering of these new methods for birth spacing.

In-service trainings were conducted in 18 care units, surpassing the 50% goal of visited services for personnel performance improvement, information services, logistics, supervision and adequate IEC materials delivery; it was determined that 90% of the units are supplied with IEC materials.

Technical support was offered so that services can be locally supervised and the information analyzed, in order to identify and resolve problems. As a result, more than half of the care units are carrying out these processes.

In the Maternal and Child Health Unit, the number of technical personnel was decreased which results in more difficulty for carrying out systematic supervision at the operational level. A negotiation process with other administrative units such as Medical and Internal Auditing and Social Work will begin next year, in order to include, within their visits, the verification of quality clinical and community service provision, based on the norms for maternal and child care services.

On June 27, the Internal Auditing Department carried out the first inventory of the contraceptive methods supply at 40 of the 43 service units, corresponding to 93% of units. It was found that 90% of the units were stocked with one or more methods at the time of the inventory, a 2% improvement in relation to the monitoring survey data from November 2002.

Table 49 - Indicator monitoring and compliance

Indicator	2003 Target	% Achieved
CYP	100,00	101
New users	30,000	101
Counseling, use and application of the FP norms manuals for *Gyn-Ob.* residents and nursing students training	100%	100
Quarterly monitoring of the 2 training centers	100%	100
% services with tutorials	50%	55
% of women leaving with contraceptive method post partum	50%	66
% of services that offer natural methods	60%	73
IEC section creation, in the Public Relations Dept. of IGSS	100%	100
% of FP services stocked with IEC materials	100%	90
% of FP services supervised quarterly by central level	75%	30
% of FP services supervised monthly by the local level	90%	90
% of FP services that analyze local information monthly	75%	50
% of FP services personnel trained in logistics	90%	100

[12] Health Statistics Bulletin – Actuary and Statistical Departament - Jan. To Dec. 2002.

Indicator	2003 Target	% Achieved
% of FP services stocked with contraceptives	90%	88[13] 90[14]

Organization and Planning

Consistent support for the Institute's family planning technical group was offered through mo nthly meetings and biweekly coordination and support visits, primarily to the two training centers; the *Gineco Obstetricia* and Dr. JJ Arévalo B Hospitals.

In conjunction with Georgetown University and the Guatemalan La Leche League, the introduction to the natural methods for the IGSS services begun in April 2002, and are now included in the Institute's daily registry and monthly information systems; both providers and users readily accepted this new alternative to birth-spacing.

IGSS, in conjunction with *Calidad en Salud* presented the results for the offering of natural methods in the Latin American Workshop for lessons learned on the offering of the Standard Days Method[15], held in Tegucigalpa, Honduras on the 22 and 23 of July 2003. The presentation was highly successful and serves as a model for other Latin American countries to emulate.

Training

A total of 247 institutional personnel were trained in counseling, use and application of norms, and 121 in the offering of natural methods.

In the *Gineco Obstetricia* and Dr. JJ Arévalo Hospital training centers, IGSS medical personnel were trained on how to use the Minilap with local anesthesia for voluntary female surgical contraception and in male vasectomy with out scalpel. Also, they were trained in IUD insertions, for interval as well as post partum.

203 members of the personnel from all services were trained in balanced counseling, providing them information and education materials (algorithms and cards); 184 family planning service providers from 18 units received in-service tutorials performance, information, supervision and logistics processes improvement.

[13] Monitoring of IGSS Logistical System Survey , (EMSL) November, 2002
[14] Inventory of Methods conducted by IGSS, June 27, 2003
[15] "Collar" Method

Table 50 - Summary of trained personnel for 2003

FP	Doc.	Nurse	A. Nurse	T.S.	Adm	Prom	Educ	Other	M	F	Total	Goal	%
Counseling, use, knowledge and application of norms	79	17	38	13	15	3		82	98	149	247	180	137
Replicas for natural methods	6	10	25	12		64	2	2	43	78	121	300	40
In-service Training in Female AQV	14								9	5	14	20	70
In-Service Training in IUD insertion	17							16	13	20	33	20	165
In-Service Training for IUD post obstetric event	24								17	7	24	40	60
In-Service Training for vasectomy without scalpel	5								5		5	5	100
Balanced Counseling	11	46	90	47		1	6	2	14	189	203	150	135
In-service tutorials	30	16	40	10	12	72	2	2	74	110	184	60	307
Total	186	89	193	82	27	140	10	104	273	558	831	775	107

3.1.2. AIEPI AINM-C Results

The IMCI strategy's application has been effective and well accepted by the children's care services providers; a better systematization of the care processes was achieved and greater development of the prevention component increasing basic measures to improve knowledge and health practices by the provider as well as the families.

The IMCI strategy's implementation received a big boost with the printing and distribution of a norms manual, an official IGSS quality tool for the provision of services to care for children.

Monitoring and Indicator Compliance

The training of the medical residents from the pediatric post graduate program and the nursing school students meant a goal achievement of 95%, with the trained personnel surpassing the planned 90% goal.

During the second quarter, 77 community level service providers from the department of Suchitepéquez (auxiliary nurses and health promoters) were evaluated, in order to verify compliance with the technical norms (procedural tables), it was found that 77% of the evaluated personnel comply effectively with the norm.

As a result of the review of 1,723 pediatric clinical files of daily and weekly registration sheets it was determined that 100% of the service providers (16 doctors and 10 nurses) comply with the integrated care process, during visits with children that have an illness of high prevalence. In 10% of the cases this process is not followed when the visits are conducted for other causes.

24 institutional facilitators from Escuintla and Suchitepéquez departments were trained and made responsible for the AIEPI AINM-C strategy's training, supervision and monitoring. The facilitators have support from the Training and

Development Division of IGSS and from *Calidad en Salud* for the community care (primary care level) personnel training for next year.

Technical support was maintained for the training centers and there were in-service tutorials in 19 care centers, as a follow up for trained personnel.

IEC materials distribution continued; currently 90% of the service units have these materials.

98% of services are supervised at the local level with the IMCI institute facilitators' participation; the central level has few human resources.

The number of children under 6 months at IGSS who receive exclusive breastfeeding is very difficult to modify, due to the fact that women affiliated to the Institute return to their work 54 days after giving birth.

During the last quarter of 2003, an analysis of 1,121 cases at the medical units of the Pediatric Hospitals of El Quiché, Escuintla and the consultancies of Amatitlán and San Lucas Tolimán was made, finding out that 27% of mothers were giving exclusive breastfeeding, 65% combined breastfeeding and only 8% did not give breastfeeding at all.

Table 51 – Indicator Monitoring and Compliance Table

Indicator	2003 Target	% Achieved
% of child care personnel trained to apply the strategy	90%	95
% of trained childcare service personnel who comply with technical guidelines	65%	77[16] 100 and 90[17]
Training of pediatric residents and nursing students to apply the strategy	100%	100
Quarterly Monitoring of 6 training centers	100%	100
Induction of the AIEPI AINM-C strategy in Maternal and Child Health Unit at the management level	100%	100
% of basic service team's personnel trained to apply the AIEPI AINM-C strategy	90%	10[18]
% of services with tutorials	50%	60
% of childcare services supplied with IEC materials	100%	90
% of childcare services supplied with medicines	75%	99[19]
% of services supervised quarterly by central level	75%	30
% of services supervised monthly by local level	90%	90
% of services that analyze local information monthly	75%	50
% of completed immunization for children 12 to 23 months	80%	ND[20]
% of children less than 6 months who are exclusively breastfed	50%	27%

[16] Corresponds to Suchitepéquez community level evaluation.
[17] Results from the review of 1,723 clinical practices, daily and weekly registration sheets of the Pediatrics Hospital.
[18] 24 facilitators trained on the AIEPI AINM-C strategy's implementation of community levels from Escuintla and Suchitepéquez.
[19] IGSS (EMSL Logistical System Monitoring), November 2002
[20] Hard to measure indicator from IGSS, due to having access to immunization service only if parents of child (a) are working and give rights, every 3 months. Population varies.

Indicator	2003 Target	% Achieved
% of TRO use or liquid intake during diarrhea episodes	75%	100[21]
% of pneumonia cases treated by service providers	85%	100[22]

Officialization

The IMCI norm manual, approved by management is the official norm for care services for children at the Institute.

Organization and Planning

The Pediatric Hospital is the IGSS' principal level III referral center; it functions as a training center for the IMCI strategy's application for Institute and MSPAS' personnel, with a 2002 annual demand for 129,498 outpatient visits.

100% of cases for diseases are evaluated, classified, treated and counseled according to the IMCI strategy's norms. Also, 100% of the pneumonia cases were treated with the appropriate antibiotic, according the norm and 100% of the files recorded the nutritional status as well as the application of the immunization table.

100% of cases for diseases are evaluated, classified, treated and counseled according to the IMCI strategy's norms. Also, 100% of the pneumonia cases were treated with the appropriate antibiotic, according to the norm and 100% of the files recorded the nutritional status as well as the application of the immunization table.

10% of consultations are for reasons other than illnesses prevalent among children, and in these cases the IMCI strategy was not applied.

Training

498 members of the institutional personnel were trained in the IMCI strategy's application, surpassing the established 320 persons goal.

Training for 100% of the service providers at the community level for the Escuintla and Suchitepéquez Departments (300 total) in the AIEPI AINM-C strategy's application had been planned for this year. Due to POA programming delays, however, only 24 facilitators were trained and will be responsible for this process during the first quarter of next year.

Seventy-nine members of the personnel from 19 units received in-service tutorials for performance improvement in the strategy's application.

[21] Results from 1,723 clinical files reviewed for daily and weekly registration sheets from Pediatrics Hospital.
[22] Results from 1,723 clinical files reviewed for daily and weekly registration sheets from Pediatrics Hospital.

Table 52 - Summary of trained personnel for 2003

IMCI	Doct.	Nurse	A. Nurse	T.S	Adm	Prom	Educ	Other	M	F	Total	Goal	%
Strategy's application	112	65	185	17	64	29		26	179	319	498	320	156
AIEPI AINM-C induction	5	1		2			1	2	5	6	11	11	100
AIEPI AINM-C facilitators application of strategy	8	5		3	3	0	2	3	5	19	24	300	8
In-service tutorials	37	10	21	5				6	29	50	79	60	132
Total	162	81	206	27	67	29	3	37	218	394	612	691	89

3.1.3. IEC Results

Introduction

With the creation of the Department of Social Communication and Public Relations, the *Calidad en Salud´s* technical support was strengthened to hachure that future IEC strategies from this Department assure that the behavior of mothers and children with the right to health services changed.

Officialization

According to the sixth point of Act 06, unanimously approved by the Board of Directors during a session on Jan. 23, the Public Relations Department was restructured and will be renamed the Department of Social Communication and Public Relations. The new department will include an Information, Education and Communication Section, with its own designated human and financial resources.

Organization and Planning

The IEC section of the Department of Social Communication and Public Relations will be responsible for control and stock of IEC materials at institutional care service units, which will result in the timely delivery of materials and avoidance of inadequate supplies. It is important to highlight that IGSS is committed to reproduction of materials to help institutionalize the IEC component within the Institute.

Materials, Norms and Guidelines

The IMCI manual was printed and its distribution begun, as the official IGSS norm for children's care.

Client satisfaction exit interviews were conducted for family planning services and IMCI, in the hospitals of *Gineco Obstetricia, Pediatría, Dr. J.J Arévalo, Escuintla, Mazatenango* and *Unidades Periférica,* of Zone 5 and 11.

Distribution of the Family Planning Norms Manual and IMCI was completed. 100% of the providers have manuals and 90% of the services are supplied with IEC materials.

The Family Planning Educators Manual was finalized and validated, is being reviewed by IGSS, and is pending approval for printing.

The MSPAS AINM-C material was adapted to IGSS clients characteristics, mainly the women and children algorithms, for implementation next quarter.

Training

Training in IEC formulation processes and communication plans was conducted for the personnel from the Department of Social Communication and Public Relations and the Maternal and Child Health Unit. AIEPI AINM-C material was validated at the community level in Escuintla, and personnel from the department's Regional Directorate was trained.

Table 53 - Review of trained personnel for 2003

IEC	Doc	Nurse	A. Nurse	T.S.	Adm	Prom	Educ	Other	M	F	Total	Goal	%
IEC process and communication plans				1	2		1	14	4	14	18	18	100
IEC process Level I	2	5		2		26	3	2	6	34	40	40	100
Materials validation	1	7	2			27	1	1	9	30	39	39	100
Total	3	12	2	3	2	53	5	17	19	78	97	97	100

Exit Interviews

Family Planning

154 exit interviews were conducted at the three hospitals that offer the most family planning services, the *Gineco Obstetricia, Dr. JJ Arévalo* and *Suchitepéquez Hospitals,* in order to learn how clients perceive the attention they receive.

66% of the users are between 20 and 29 years of age, and 8% corresponds to visits by adolescents, The preferred method is the injectable for three months (46%) followed by the pill (15%). It is encouraging to observe that 83% of the interviewees are satisfied with the services.

74% of new users were given education materials on the selected method and 82% considered the orientation process was good. The principal weakness was identified as the waiting period, where 29% considered it as not enough good and 64% as good.

AIEPI-AINM-C

Calidad en Salud made 255 exit interviews to evaluate the application of the IMCI strategy from the user point of view, in the Hospitals of Escuintla, Suchitepequez, Dr, Juan José Arevalo hospital and Pediatrics as well as the Periferia Unit of Zone 11, finding that 93% of the interviewed people have their pediatric carnet, 97% of the consultancies does not show danger signs, 32% attended because of respiratory diseases, 26% growth monitoring control and 22% for vaccination. 52% of children had their vaccination chart completed and 22% were given a new appointment for vaccination.

87% of the clients had a prescription and 77% of the mothers were explained on how to use the medicine. 83% of children were weighed but only 14% used the growing chart, issue that has to be improved. 64%of mothers were aware of the nutritional situation of their children. People recognized different signs of danger: 74% recognized fever as a sign of danger, 26% diarrhea, 19% children who cannot eat or breastfeed and 18% respiratory difficulties.

59% of mothers recognized a poster at the hospital or clinic related to IMCI, such as signs of danger or vaccination chart and 54% received counseling on how to give healthy food to their children.

3.2. Results 2: Maternal Child Programs are Better Managed

3.2.1. Support System Results

During 2003 important results were obtained for the support systems, mainly in the contraceptives component. An achieved result was the approval through an agreement by management of the Logistical Contraceptive Administration Manuals, with the added commitment for financial payment to the UNFPA. Also achieved was the 100% training of the pharmacy and warehouse personnel in the use, knowledge and application of manuals.

The adoption of supervision-facilitation approach by the Medical Auditing Department of the Institute is also considered a success.

Officialization

IGSS Management Document No. 7036 dated September 17, 2003, officialized the extension of the Letter of Understanding between IGSS and *Calidad en Salud*, to continue to cooperate for one more year, until September 30, 2004. IGSS thanked the program for the success obtained that has benefited the working population of Guatemala and their families.

IGSS Management Document No. 6977 dated September 10, 2003, contains the instructions on the norms process for the reception, supply, distribution and payment of contraceptive methods to the UNFPA that IGSS administration received. This instruction is of vital importance in the institutionalization process for the purchase of contraceptive methods, since it establishes a quick and effective procedure, mainly in the budget allotment and payment of contraceptive supplies.

By Management Agreement No. 10/2003 dated March 25, 2003, the "Normas y Procedimientos de Logística de Anticonceptivos del IGSS" and the "Marco Conceptual para el Sistema de Administración Logística de Anticonceptivos del IGSS" Manuals were officially proveed as IGSS manuals.

Organization and Planning

Technical assistance for the Medical Auditing Department continued and a process of supervision with facilitation approach we initiated in three service units of the Institute: *Enfermedad Común, Dr. JJ Arévalo* Hospitals and the *Policlínica*.

The supervision with facilitation approach was accepted by supervisors (trained last quarter) as well as by the personnel being supervised, yielding excellent results for the process improvement in the provision of clinical and administrative services. In this process, they were supported by the Management, who assigns a specific budget for problems' resolutions that require financial resources.

The Internal Auditing Department conducted the first inventory of the contraceptive methods for 40 of the 43 IGSS units, corresponding to 93% of the services, on June 27. Found was a 90% supply of one or more contraceptive methods at the time of the inventory, improving by 2% (88% in monitoring survey) of reported figures from November 2002. 100% of the reporting units were stocked with Copper-T and condoms and 95% with orals and injectables for three months.

The tool for logistical contraceptive information analysis was completely implemented in the Maternal and Child Health Unit, from which IGSS obtains management information on decision-making for projections, tendencies and statistics on contraceptive methods.

Training

In conjunction with the UNFPA, Maternal and Child Health Unit, Internal Auditing and *Calidad en Salud*, 127 IGSS members from all services units were trained in the use, knowledge and application of the logistical administration manuals for contraceptives. The trained personnel represented mainly pharmacy and warehouse managers, pharmacy professionals, directors, managers and others responsible for family planning services.

The training process allowed IGSS, not only an improved logistics and control in contraceptive management systems, but also an improved system to ensure a consistent supply of medicines.

It is important to note that the current IGSS administration nominated a *"Quality Assurance Commission"* in the month of August, which will be responsible for service provision improvement in the service units of the Institute, using quality principles. There exists a close relationship with the above-mentioned commission and *Calidad en Salud* that enabled *Calidad en Salud* to offer technical support for help with objective compliance.

All of the *Calidad en Salud* technical team supported the IGSS Quality Assurance Commission, in a training process directed towards achieving their objective that include: improve the Institute's service provision with a focus on quality principles. IGSS and *Calidad en Salud* jointly conducted a training program that responded to commission needs, starting with issues such as quality, team work, problem resolution and development of process, results and impact indicators.

Table 54 - Summary of trained personnel for 2003

Support Systems	Dct.	Nurse	A. Nurse	T.S.	Adm	Prom	Educ	Other	M	F	Total	Goal	%
Supervision-facilitation	57	7		21	3		1	20	61	48	109	50	218
supervision-facilitation Induction at the management level	25	2		1	2		1	10	26	15	41	40	103
Use and management of the CPTs and Pipeline	3								3		3	3	100
Quality Process	2	1		1	1			3	4	4	8	25	32
Logistical Administration Manuals Use, knowledge and Application		36	12	2		8		69	77	50	127	50	254
Instruments use, gathering and analysis of Information on FP and IMCI	34	8	3	26			4		15	60	75	66	114
Total	121	54	15	51	6	8	6	102	186	177	363	234	155

Equipment[23]

In coordination with management, the Internal Auditing Department and the Department of Social Communication and Public Relations, medical, computer and audiovisual equipment was presented to IGSS at the Institute's auditorium in an official act on September 26. This equipment's principal function is to improve the quality of services provided at the community levels for the Escuintla and Suchitepéquez departments.

[23] Annexes include the listing of equipment, costs and services that received them through the Internal Auditing Department Act.

During the presentation of the equipment, the Internal Auditing Department officially recorded the persons and services that received the equipment. Included is a clause stating that each Department will be responsible for the inclusion of the assets in the responsibility card of service providers, and for making sure the equipment is used to benefit the maternal and infant population.

Anecdotes

After the IMCI strategy was applied in the IGSS Amatitlán clinic, where support service personnel participated in the capacity building, the unit's administrator was very satisfied with improvement of the quality of services obtained by applying the strategy.

The administrator took a leadership position and planned weekly meetings with all members of the personnel, in order to maintain constant training and to expand the educational process not only to the population using services at the clinic but also to the companies ascribed to the unit.

Many times when it is least expected, personnel initiate positive answers, leadership and impact by themselves.

During the Tiquisate Hospital in-service tutorials (Escuintla, southern coast of Guatemala), the personal in change of pharmacy failed to send the monthly statistics on contraceptive supplies used, a demonstration of the lack of communication between personnel.

The tutorials highlighted this weakness by addressing the providers' performance; the two workers realized the importance of teamwork as a quality principle and that decisions need to be taken based on real and timely information.

Lessons Learned

The IGSS' immunization guide that includes the complete 5-year schedule was validated and authorized. During the trials some nurses made the observation that it was very difficult to establish dates for the next five years (not easy to find calendars); based on this logical assumption, instructions were given to program only the next year.

We may be careful when validating materials, but we need to be flexible and accept suggestions from those who actually use the materials on a daily basis.

The reproductive health technical group is coordinated by the Maternal and Child Health Unit and is made up of representatives from the metropolitan area hospitals, with scheduled monthly meetings that have as their objective the unification and improvement of family planning services.

The group expanded this year to include representatives from small units such as the clinics from *Villa Canales* and *San José Pinula*.

Since it is a high-level technical group, it was strengthened by the incorporation of new persons, and the experiences exchanged were successful.

At the Suchitepéquez department's regional Directorate a strong work team was selected for the monitoring and follow up to the IMCI strategy's application at the community level of health care.

As a result, the process was decentralized and currently functions as an excellent training unit (self motivated, team information analysis and problem resolution). This team of health providers has as their main objective, providing quality care to the satisfaction of clients, in this case, children.

Selection of responsible persons that affect internal and external behavior changes is fundamental for having quality services and results.

Institutionalization

The IMCI Procedures Manual was authorized as the official norm for IGSS' pediatric care, which has helped to institutionalize the IMCI strategy.

IGSS' payment of contraceptive supplies to the UNFPA, is evidence of the institutionalization in the assurance of contraceptive methods.

A Management Agreement authorized the application of the contraceptive supply's Logistical Administration Manual. This is another example of institutionalization. IGSS will have at their disposal not only their own tools for better contraceptive supply and control, but also the improvement of service provision.

With the technical support and after two years of efforts from *Calidad en Salud*, an important objective was accomplished: The agreement of the IGSS Board of Directors to create the Department of Social Communication and Public Relations. Included in this department is an Information, Education and Communication Section, (IEC).

The IEC section has been assigned human and financial resources from IGSS (section director, social communicator, trainer designer and illustrator), which will facilitate the design of communication strategies and the reproduction of materials to benefit Guatemalans.

Training for the institution's human resources with transferring of knowledge, skills and is part of institutionalization. In this case IGSS will have excellent trainers who will give continuity to the training process in family planning, IMCI, AIEPI AINM-C, supervision-facilitation, logistics and balanced counseling.

The Maternal Child Health Unit personnel trained in the contraceptive procurement tables (CPTs) and in the use of the Pipeline will be responsible for contraceptive methods projections and requests to the UNFPA, therefore guaranteeing good logistics administration of supplies.

Limitations

The constant management changes generated a climate of instability at the institution's middle management levels, which has delayed the management processes in compliance with joint work plans. The AIEPI AINM-C strategy for the community level for the Escuintla and Suchitepéquez departments, programmed for the last quarter of 2003, and delayed for the first quarter of 2004, serves as an example.

As an IGSS decision, in order to provide users the right to services, users need to provide proof in the form of a work certificate every 3 months. This decision has produced an estimated 25% decrease in the number of visits, affecting all Institute programs, including family planning and IMCI.

Although there is a 10-year history of family planning success at IGSS, evidenced as cost effective [24], with norms and official manuals for good services provided, family planning service is still not officially sanctioned by the internal laws of the Institute.

This challenge to the official sanction of family planning services has generated instructions of a temporary nature from the central level to the service units, limiting provision of such services for no more than 54 days post partum, both for affiliated members as well as Social Security beneficiaries. This decision was made when the Board of Directors was presented with a proposal to give official status to family planning services. A final and positive resolution is anticipated for the first month of 2004.

[24] Institutional economic impact from the Family Planning program at the IGSS. GSD Consultores, AVSC Internacional, 1999

4. ADMINISTRATION

Unidad Ejecutora

Calidad en Salud continued to support the UE in administrative and financial management at the central and regional levels, training new Health Area personnel regarding procedures for procurements and overseeing the programming of counterpart funds.

Calidad en Salud project funds are utilized in conjunction with counterpart funds and are used for training, reproduction of materials, equipment, and related activities. For example, *Calidad en Salud* donated a computer, and printer to PROSAN for their micronutrient activities. On March 24, 2003 *Calidad en Salud* supported SIAS by providing on load a computer and printer (This equipment must be returned to the program by the end of Zoel Leonardo´s management in the abovementioned unit).

A more detailed description of *Calidad en Salud´*st support to the UE is included in this report under Result Three.

Calidad en Salud

During the year 2003, *Calidad en Salud* continued supporting all components at both the central and area levels in providing funds for training sessions, reproduction of materials, equipment, and all related activities in order to accomplish the goals established by each component. Also, *Calidad en Salud* continues to provide family planning equipment to the 8 priority areas and the rest of the country. Administration in conjunction with each project component advisor is monitoring the equipment. A more detailed report is annexed for reference.

Calidad en Salud completed procurement process of equipment for IGSS´ clinics for family planning purposes. On September 26, 2003, *Calidad en Salud* delivered all the equipment to IGSS authorities in a ceremony held at the institute where Mary Ann Anderson, Health and Education Chief of USAID/Guatemala, delivered the equipment on behalf of USAID/*Calidad en Salud* to IGSS authorities.

On April 21, 2003, Ligia Delgado, Logistics Assistant located in the *Unidad Ejecutora* office, reported the loss of a laptop assigned to her. *Calidad en Salud* made an official report of the loss to the *Unidad Ejecutora* and denounced the loss to the Public Ministry.

On August 20, 2003, Mr. Glenn Anders visited *Calidad en Salud* to provide the last obligation of money, US$3,034,031 to URC in order to implement the last year of activities through September 2004.

Calidad en Salud in conjunction with USAID has finished editing the "*Noticias de Calidad*". It is expected that the first round will be published by the early January 2004 in Spanish.

As mandated by the contract, *Calidad en Salud* delivered 10 copies of all the IEC materials and manuals produced by the program to USAID on December 17, 2003. Also, for reference, Annex H, "Deliverables" describes all the activities accomplished and products delivered during 2003. There are still some products to be delivered next year, which will be followed up accordingly.

Staffing

Staffing changes during the quarter include

- Dr. Fidel Arévalo resigned as manager of the OR AEC-PS in December 2002. Consultant Irene Monzón was hired as the new local manager and Consultant Nelly de la Torre was hired as the local facilitator for the OR AEC-PS in January 2003, but after her resignation in April 2003, Guillermo López y López, replaced her.

- On August 18th, Irene Monzón, resigned as the AEC OR Manager. Dr. Alvar Pérez, Quetzaltenango Health Area Facilitator was transferred to San Marcos in order to replace her. Dr. Jürgen Maulhardt, Totonicapán Health Area Facilitator was also assigned to oversea Quetzaltenango.

- Dr. Edmundo Domínguez, AIEPI technical advisor resigned in February 2003.

- Dr. Victor Rodas, ATR for Jutiapa, Jalapa and Santa Rosa left his position in February to become the new family planning technical assistant for *Calidad en Salud*, a position funded by JHPIEGO. Lissette Castellanos replaced Dr. Rodas as the new ATR in March 2003.

- Leonel Vásquez, FI of the San Marcos Area was terminated in March. In April 2003, José Say Sarat was hired as his replacement.

- On April 21, 2003, Rajni Sood was hired as the new Project Coordinator in Bethesda replacing Dawn Crosby.

- On December 31, 2003, 6 Health Area Facilitators, 6 *Facilitadores de Primer Nivel*, and 1 Facilitator for IGSS terminated their contract with *Calidad en Salud* according to the agreement.

  Calidad en Salud is planning to strengthen quality activities in the areas through each project component as well as launch an initiative on collaboratives in the hospitals of the eight priority areas. For these purposes, *Calidad en Salud* will continue working with 2 Health Area Facilitators as consultants, Mélida Chaguaceda and Carlos León, in order to cover these activities. Collaboratives will be partially financed under QAP funds.

- Aldo Sibrian, Logistics consultant and Patricia Ceballos, IEC consultant also terminated their contracts in December 2003.

Meeting with partner organizations

On February 20, 2003, a meeting was held in Bethesda, Maryland with representatives of the subcontractors. The meeting was attended by the Chief of Party. Unfortunately, EngenderHealth and Population Council did not attend the meeting due to inclement weather in the DC metropolitan area.

Procurement

Calidad en Salud supported the procurement of family planning equipment for IGSS and MSPAS and assisted in the distribution of IUD insertion kits, vasectomies and AQV-F to the health districts of the MSPAS nationwide.

Other

Rafael Flores, consultant from Departement of International Health at Emory University, visited Guatemala from February 10-15, 2003 to provide technical assistance to *Calidad en Salud* with the official launching of the AIEPI AINM-C strategy, emphasizing the Minimum Expected Weight Gain (MEW) Table.

Peggy Kooniz-Booher, Senior Technical Advisor for Nutrition/Behavior Change Communication based in URC/Bethesda, visited Guatemala from March2-14, 2003 to: 1) review and update publications pipeline document; including defining for any upcoming publication what type of document it will be and designing a basic outline of its contents; and 2) in conjunction with the mentioned document, also develop a revised timeline for the development and publication of these documents.

A consultant from EngenderHealth, Dr. Consuelo Juarez, visited Guatemala from May 4-17 in order to work with facilitative supervision activities.

A consultant, Dr. Bernardo Ramírez visited Guatemala from May 4-17 to work with health area personnel and operations staff from *Calidad en Salud* on qualitative management plans.

Consuelo Juárez, consultant from Engender Health, visited Guatemala from May 4-17, 2003 to: 1) provide technical review of the current supervision system instruments; 2) provide technical assistance in revising the conceptual framework, methodology and tools for the facilitative supervision strategy; 3) provide technical assistance in adapting the AVSC/Engender Health Facilitative Supervision Manual for *Calidad en Salud*; 4) provide design support for a preliminary facilitative supervision system for the community level; 5) train MSPAS/IGSS supervisors on facilitative supervision and performance improvement strategies; 6) conduct a presentation on benchmarking for community facilitative supervision; and 7) visit community level health services.

Dr. Tisna Veldhuyzen van Zanten visited Guatemala from May 12-24 and October 6-17 to work with *Calidad en Salud* technical and administrative staff.

Dr. Diana Silimperi and Dr. Oscar Núñez visited Guatemala from May 18-24 to work on quality assurance and collaborative approach to clinical IMCI. Dr. Oscar Núñez made a second trip to Guatemala from June 7-15 to work on collaboratives to improve the performance of clinical IMCI.

Paul Richardson, the Principal Investigator for the Operations Research AEC-PS, visited Guatemala from June 2-21 and October 27-November 12 to follow up on operational and support activities for the operations research study in San Marcos with the OR Manager.

Ligia Delgado visited Nicaragua from July 16-18 to participate in the *"Taller Regional de América Latina y el Caribe sobre Seguridad Anticonceptiva"* organizad by the Delivery/Policy project of John Show, Inc.

Carlo Bonatto, *Calidad en Salud* IGSS technical advisor, visited Honduras from August 20-22, 2003 to attend the *Primer Congreso Nacional de Salud Sexual y Reproductiva*. He delivered a presentation on contraceptive methods at one of several meetings that took place during the event. The objectives of the conference were threefold: 1) to present advances in reproductive and sexual health in the countryside within the framework endorsed by Honduras at the conferences of Beijing and Cairo; and 2) to present knowledge of the methodologies used to improve the quality of sexual and reproductive health at different levels, and 3) to exchange experiences that have developed in the countryside of the SSR in Honduras. Dr. Bonatto travel under Engender Health´s direct funds.

Elena Hurtado of *Calidad en Salud* traveled to Bethesda from September 14th-24 , 2003 in order to 1) Attend Global Conference on "Reaching Men to Improve Reproductive Health for All; 2) Attend 5th International Conference on the Scientific Basis of Health Services "Global Evidence for Local Decisions"; 3) Present Poster entitled "Operations Research to Improve Growth Monitoring and Promotion in Guatemala"; 4) Update URC staff of IEC activities/progress; and 5) Visit counterpart organizations and collect relevant information on male involvement in family planning and reproductive health issues related to adolescents.

Charles C. Pecarro, URC President visited Guatemala from October 13-17 to meet with *Calidad en Salud* staff, counterparts and USAID personnel. Mr. Pecarro did not travel under URC project funds.

Rajni Sood, *Calidad en Salud* project coordinator based in URC/Bethesda visited Guatemala from October 12-24 to: 1) meet with Chief of Party and Administrative Staff to review program implementation and cost-to complete budget; 2) discuss development of project close-out plan; 3) work with documentation consultant on *Noticias de Calidad*; and 4) assist in production of the Quarterly Report.

Marcela Aguilar, program officer from Johns Hopkins University Center for Communications Programs (JHU/CCP) visited Guatemala from November 15-25, 2003 to: 1) prepare, in collaboration with *Calidad en Salud´*s IEC/BCC and FP teams, the agenda, objectives and core-content of a two day workhop for the GTI-IEC focused on the development of a national youth strategy; 2) facilitate the two-day GTI-IEC workshop with *Calidad en Salud* to identify and to reach consensus on the guidelines and focus of the strategy; 3) write a summary of the results of the

workshop including a draft national youth strategy; and 4) work with *Calidad en Salud´s* IEC/BCC and PF teams to discuss ideas related to the future development of a men in reproductive health strategy.

A consultant Orlando Urroz visited Guatemala from December 15-20, 2003 in order to: 1) Meet with technical advisors of the FP and logistics teams to review program achievements to date and to identify opportunities to introduce QI methodology. 2) Work closely with project counterparts to transfer basic skills and knowledge and to develop a QA plan for both components. 3) Visit health centers to fine-tune the QA plan. 4) Reach agreement on indicators for improvement for both components and a plan to monitor and document improvements. 5) Familiarize with overall QA plan for *Calidad en Salud* and discuss opportunities to introduce QM within area and area hospitals. 6) Discuss preliminary plan to introduce QA within area and area hospitals as basis for institutionalizing QA in health system.

5. BUDGET AND EXPENDITURES

The following table presents budget categories and amounts for expenditures for the past quarter and project-to-date and the balance.

Table 55 -Budget, Expenditures, and Balance in US$

Category	Mod 10. Itemized Budget	Balance Available 01/01/04	Expended to Date Vouch 49	Expended this period 10/03-12/03