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#### HEALTH REFORM AND DESCENTRALIZATION PROJECT

#### **REDSALUD**

#### For:

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The author's views expressed in this report do not necessarily reflect the views of the United State Agency for International Development or the United State Government.

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#### I. EXECUTIVE SUMMARY

#### REDSALUD II

#### Consolidation Changes On The New Health System Of The Dominican Republic

Dominican Republic Social Security System was formally initiated with passing the Social Security Law 87-01 in 2001, an thus the country entered in a phase of structural reforms in the healthcare system, hoping to advance in the improvement of its coverage, equity, efficiency and quality indicators.

The main reason behind such an ambitious program of reforms is that the "old" healthcare system lacks the responsiveness to the community's increasingly complex demands for social protection against disease.

One of the reasons for the "old" model's demise, characteristic for most Latin American countries, lies in it "curative" and "fragmented" approach. It lacks a cohesive and holistic vision of healthcare through which it could be considered a social and economic right of the citizens, rather than a simple assistance in benefit of the poorest.

The new health system is based on solid sectoral stewardship and broad social participation in its management and supervision; capable to promote and assist the construction of a sustainable model of protection against disease, based on social solidarity. It is a universal health insurance program, managed and subsidized by the government; citizens receive care from autonomous, pluralistic service providers and funding is tied to productivity and quality.

In this context, the Dominican health reform could be defined as an unique and complex process, which demands both simultaneity and gradualism in its institutional and manpower construction, starting from simple to complex, from the periphery to the center, at a rhythm determined by the authorities' and communities' capacity to internalize and assimilate the offered technical assistance, so that they are able to produce changes and make them sustainable.

REDSALUD Project began its first phase in July 2000 until July 2005, continuing with a second until September 2007. The purpose of project's second phase is to continue supporting the country's implementation of a strategy for improving its healthcare system. It is ultimately expected to contribute to improving equitable access to basic, high-quality healthcare services, especially among the poorer and most vulnerable population.

The project's objectives are: to support the development of stewardship function especially at local and regional levels; to support the social participation and mobilization in the health sector; to support the healthcare delivery through decentralized provider networks, especially in the public sector; and to support the social insurance model proposed by the reform.

The Project's actions focus on:

- A "systemic" approach rather than a "program" one to current problems;
- Tuning project's activities with the national change dynamics;
- Supporting the "new" model's integral development;
- Targeted efforts at regional, local and operative levels of the system;
- Strengthening national capacity by promoting technology transfers as a dissemination strategy for enhancing sustainability;
- Coordination and integration with other areas and projects sponsored by USAID

The Project will apply a participative methodology for gradual advance, through its original approach of "learning by doing", initiating with a situational diagnostics, defining priorities, action alternatives and their development and implementation.

#### **GLOSARY OF TERMS**

**ARS**: Healthcare Risk Administrator **CAH**: Hospital Administration Councils

**CERSS**: Executive Commission on Healthcare Sector Reform

**CES**: University Center for Healthcare Studies

**CNSS**: National Council of Social Security

**DIDA**: Directorate for Information and Protection of the Beneficiaries

**DPS**: Provincial Healthcare Office **DRS**: Regional Healthcare Office

**HISTOCLIN**: The system of clinical records management (software)

INTEC: University Technical Institute of Santo Domingo

**IGP:** Global Index of perception of the healthcare services management

**IPS**: Healthcare Services Providing Institution

**ISU:** Customer Satisfaction Index

**OAU**: Users Attention Office

**ONAP**: National Office of Administration of Personnel

PAI: Amplified Immunization Program

**RARSS**: World Banc Program supporting the Health Reform **PSS**: Healthcare Services Providing Institution, same as **IPS** 

RIV: Personal Immunization Register (software)

**SAMI**: Mother-child Service System (software)

**SDSS**: Dominican Social Security System

**SENASA**: National Social Security Organization **SESPAS**: Ministry of Health and Social Assistance

SFS: Family Health Insurance, part of the Dominican Social Security System

**SIGHO**: Hospital Administration Integrated System (software)

**SISALRIL**: Superintendence of Healthcare and Labor Risk

SISPROSA: IT Systems and Procedures Company S.A.

TSS: Treasury of Social Security

**UGAM**: Environmental Administration Unit of the City Government **UMDI**: Department for Development and Modernization in SESPAS

#### II. PROJECT'S PROGRESS:

The Family Health Insurance-the Contributive Regime, was formally initiated on September 1, 2007. It was designed for the formal sector workers. It represents another step towards the complete initiation of the new Healthcare Social Security System in the Dominican Republic, which was created by the Law 87-01 in 2001.

The final step, yet to be introduced, is the Subsidized Contributive Regime for the independent workers and the informal sector of the economy. We have to mention the fact that the Subsidized Regime, initiated in 2005 and directed to the financial covering of the poorest people, as far as health issues are concerned, presently counts with over one million beneficiaries throughout the country and almost 125 thousand in the Region V.

There are certain difficulties in different sectors, a fact not surprising, considering the magnitude and complexity of the process. These problems are expected to be overcome gradually, as the participants and the beneficiaries of the process, get to know better their rights and duties and get a better understanding of their own roles within the new healthcare model.

This fact represents a significant advance for the State as well as for all the entities involved in the development of the new model of social protection in the healthcare area. It represents an opportunity and a challenge both for the Project and for the beneficiary public entities at the same time.

All the managerial tools, developed by the Project REDSALUD will be tested with the progress of the Healthcare reform. They were designed to support the improvement of the public institutions abilities to respond and their manage processes, which certainly will play a fundamental role during this new step.

Presently, the most of the managerial tools, designed by the Project, are being consolidated and adjusted in order to be finally incorporated in the new dynamics of managing the Office of Clients' Attention, required by the Healthcare sector reform. All these tools have a software support, developed by the Project, using a local company and technicians, called SIGHO- Hospital Administration Integrated System (software), which is available for free to anyone interested to use it. Thus, supporting the national resources and getting excellent results in a process of designing and creating informatics applications for the healthcare sector, is considered to be another of the Project's achievements.

So far, work done by the project, has covered the majority of the planned areas of managerial support, and this will provide basic support for decision-making and control of the

adequate use of the resources in the beneficiary healthcare institutions. The final goal of these efforts is to improve the abilities to access quality healthcare services, required by the clients in general and also by the beneficiaries of the Social Security Healthcare System.

The SIGHO- Hospital Administration Integrated System was introduced as a pilot project in two of the fourteen hospitals of the Region in June, 2007 (the Ramón Santana Hospital and the one in La Romana). The feedback from the preliminary evaluation is positive so far. It is very well accepted by the hospital functionaries due to its simple and dynamic use as well as its utility to the users' and resources management. The system should be introduced in the rest of the hospitals of Region V by the end of the fourth trimester of 2007, and training if needed should be completed.

The Administration of Materials and Supplies Tool development and implementation was completed with rewarding ceremony for the best projects at the end of July 2007. A study trip related to this theme to Colombia is planed for the end of October, 2007. The introduction of the tool and the training of human resources in the software application supporting this process were offered too, as this forms part of the informatics tool SIGHO.

The "Management and Final Disposal of Hospital Waste" Tool, supported by an international consultant, was completed in July, 2007. The projected work in the area of hospital biosecurity is terminated with the completion of this tool. what is Permanent follow-up of its application is needed from now on and efforts to guarantee its continuity.

The support offered to SENASA was also completed in March, 2007 by handing in the lists of codes for diagnostics, procedures, medication, disposable materials as well as the payment mechanisms, hiring and auditing of services. These products were adjusted to the Dominican reality and will be used by the public hospitals in signing of contracts and charging for provided healthcare services to SENASA and other insurance companies.

The Tutors In Action Program completed its work in the majority of managerial tools which are in their consolidation phase. A new group of tutors started working in the informatics support area.

The Tutoring In Management in Quality Services, under INTEC leadership was completed during the second trimester of 2007; the tutoring in Supplies (5) and Improving the Delivery Rooms Quality (3) were completed in September 2007; the tutoring in Healthcare Services, Cost Policy and Budgeting Portfolio (8) will be over in October 2007 with the final evaluation of the tool. The Tutoring in Managing the Office of Client Attention is going on until the process is finally introduced in all of the hospitals of the Region. More people are expected to join this tutoring during the last trimester of the current year. A new tutoring in Informatics was initiated with 14 government officials. Its goal is to improve the local capacity to

respond, manage and resolve informatics problems, related to equipment, networks and programs.

As far as formation and training of human resources form the Region is concerned, REDSALUD sponsored partially the scholarships of 41 government officials in diploma trainings in the Insurance and Auditing of Healthcare Services, done by INTEC in a joint effort with the CES University of Colombia. The training was initiated in November, 2006.

There was a great interest in these trainings from a variety of entities both from the public and the private sector. Due to this reason, INTEC and CES continued offering the training throughout 2007. The Project continued supporting the post-grade training "Management of Quality Services and Social Security" in the INTEC University, sponsoring18 students from the fifth group of graduates and 19 from the fourth group. This gives a total of 140 government officials from the Region V supported in their post-grade training for the time of these 5 groups until now.

The process of formation, training and swearing in of the 13 Hospital Administrative Councils from Region V is completed. The swearing in ceremony, presided by SESPAS was attended by representatives from different entities and institutions of the public healthcare sector. The work with these organizations is just starting and they are requesting more support so that they could eventually exercise adequately their function of strategic guidance, vigilance and social control over the healthcare institutions.

The Component involved with Social Control continued supporting DIDA-Directorate for Information and Protection of the Beneficiaries, in the process of diffusing information and creating channels for the communication between the communities and the hospitals of the Region. They used as their primary tool for that the motivation for applying the power of social control. This is a mechanism of communication between the communities and the healthcare institutions which was done through executing a number of meetings among the managing staff of the hospitals and the customers of the hospitals. Different topics were discussed there, such as the variety of services offered by the hospitals, the clients' duties and rights as well as their role within the new Healthcare System.

The systematization of the register forms for the public hospitals: 67a, 72a and the immunization record had excellent results in the 14 hospitals and the 5 Provincial Healthcare Offices – DPS. It permits to collect truthful information in a timelier manner on a variety of variables, showing the institutional managerial skills, such as service productivity, coverage and human resource productivity. The work of collecting and systematizing information was done with data back from 2004 and thus permitted to graph tendencies, averages and consolidate information up to this moment.

The work done in a joint effort with the CONECTA Project was finally completed. It dealt with Emergency Obstetric Care –COEM- and authorizing the delivery rooms in five of the hospitals in Region V. This program's goal is to improve the access and the services quality of the mother and child care in those hospitals. The principal tool used was the training of the medical and nurse personnel, local diagnostics and support for finding solutions as far as equipment and improvement of the physical structure is concerned, in order to be able to provide patients with the adequate healthcare attention.

CESDEM, the Center for Demographic Studies, handed in the final comparative report for the years 2002, 2003, 2005 and 2007 on the Autonomy and Management Index and the Perception of Quality of the Healthcare services. The results stated in both documents illustrate the positive impact of the Project's activities on improving the managerial capacity of the public healthcare sector and the healthcare services quality in the supported institutions. Two presentations will take place on the results of these investigations during this year's fourth trimester: one in the Region V and another one, open to public, in Santo Domingo.

BITRAN y ASOCIADOS presented the results from the analysis of the ENDESA surveys 1996 and 2002. They will be used as a base-line for the future evaluation of the advance of the health reform processes in such areas as the access to services, insurance and people's spending on healthcare services. Another similar evaluation will be done in 2008, using the ENDESA 2007 survey through which we will be able to observe the Health Reform impact especially on the poorest members of society.

A variety of private and public healthcare organizations from around the country have solicited the Project's collaboration in the process of implementing different managerial tools developed by REDSALUD in their corresponding institutions. This is definitely an indicator of the quality and utility of the managerial tools developed by REDSALUD. Observation visits came as a result of that request and they are meant to facilitate the knowledge and reproduction in such processes as improvement of the Client's attention services, cleaning and organization of the hospital medical records archives, administration of materials and supplies, bio security and others.

The Hospitals which expressed interest in these processes are the Bani Hospital, the IDSS Hospital – Central Level, Morgan Hospital de Santo Domingo, IDSS Oliver Pino Hospital de San Pedro de Macoris, MIR Foundation in La Romana, The Plaza de la Salud Hospital and the Engombe Hospital from the capital. The latter is one of the hospitals supported by the CONECTA Project. It is important to state that the diffusion and reproduction of positive experience activities are financed not by the REDSALUD Project but by other sources. The Bani Hospital, for example, which is supported by an international NGO, contracted the Client's Office Tutor as a consultant to be able to initiate the process of cleaning and organizing the clinical records archives in that institution, using its own funding .

In a similar manner the Punta Cana Foundation requested the Project's help at the end of 2006, to help improve the healthcare services in clinics close to the tourist complex, and especially in Veron . The request focuses mainly on improving the human resources administration and the services offered to the community. The project responded by visiting the institution, offering an over-view of its activities, as well as offering preliminary recommendations, the managerial tools developed and technical support in improving the administration of that center.

The SESPAS Statistics Office and CERSS requested support from the Project in order to push forward the systematization of the Birth Register and the Hospital Discharge processes issued by the hospitals. One of the goals of this effort is to be able to register all new born babies and include them in the immunization program before they leave the hospital. Another goal is to improve the quality of the submitted information which will help improve the citizenship legal register of the Central Electoral Commission.

This activity is related to the governmental efforts to resolve the serious problem expressed in the fact that 30% of the country's population is lacking legal identity. The project has supported the development of a software tool to respond to this request and it is being tested in two hospitals presently: the Regional Hospital of San Pedro de Macoris and the one in Ramon Santana. After the testing period concludes, it will be installed in the rest of the public hospitals of the Region and later in 35 more hospitals around the country with the World Bank sponsoring that final step.

Detailed information on the Project's activities during the period September 2006-September 2007 is offered below.

#### COMPONENT 1: SOCIAL STEWARDSHIP AND COLLECTIVE HEALTH

The Habilitation and Quality Department of SESPAS Central is the final stage of testing the functioning of the informatics' tool, developed by the project, which later will be installed in the Provincial Healthcare Offices (DPS) of the Region V.

The Sub-Project Quality Guarantee System completed its work with the handing in of the action and investment plans for the 14 public hospitals of the Region V.

# 1.1. SUB-PROJECT QUALITY GUARANTEE SYSTEM GOAL Implement a Quality Guarantee System in 8 public hospitals of the Region V of the Dominican Republic..

The component on improving the services quality, suggested by SESPAS Central and supported by the National Human Resource Administration Office-ONAP- and INTEC, completed the stage of elaborating the improvement and investment plans for the 14 public hospitals of the Region V. This tools implementation was supported by 10 tutors, directly supervised by INTEC.

Eight out of the fourteen hospitals participated in the contest on "National Prize for Quality" and "Successful Managerial Experiences", sponsored by the Dominican Government through ONAP. This is a sign of those hospitals interest and commitment to improve the attention offered to their patients and their institution in general.

The Project kept supporting together with INTEC the hospitals' activities. It is planned to have a regional presentation of the component in general as well as the improvement and investment plans done during the fourth trimester of this year and all of the Region V public hospitals are expected to participate.

- Creation and development of the 14 improvement and investment plans in the corresponding number of hospitals of the Region V.
- 3<sup>rd</sup> place, Bronze Medal awarded to Dr. Alejo Martinez Hospital in the Municipality of Ramon Santana for its participation in the National Quality Contest 2006 in the Service Quality of the Public Institutions area. The same hospital had already participated the year before (2005) in the area Promising Practices, winning 3<sup>rd</sup> place.
- Eight public hospitals from the Region V were recognized for their participation and motivation in the National Quality Contest, area of Promising Practices 2006 and they are: Dr. Francisco Gonzalvo Provincial Hospital a Romana; Guaymate Municipal Hospital; Dr. Evangelina Perozo Hospital Yuma; Miches Municipal Hospital; Señorita Elupina Cordero Hospital Sabana de la Mar; Pedro maria Santana Hospital –Los Llanos; Dr. Alejo Martinez Hospital-Ramon Santana Municipality; Regional Hospital Dr. Antonio Musa-San Pedro de Macoris.

1.2. SUBPROJECT ON AUTHORIZATION AND CERTIFICATION				
GOAL	Improve the information system in the Habilitation and Quality Department of SESPAS Central and the 5 DPS of the Region V.			

The Habilitation and Quality Department of SESPAS Central completed the introduction of the forms, which contents will feed the institutions of the Healthcare Services Providers-PSS-database. The software handed in by the project is presently being tested. This informatics tool will support the registered information from the inspection and control forms, which are a requirement for the authorization and quality, and according to the score achieved a certain percentage will be assigned to every inspected hospital. This tool will be very useful in the process of improving and controlling the quality of the services of all hospitals, be it public or private.

This tool will be installed as well in the five DPS of the Region. It will help them to go ahead with the process of monitoring the qualifications, given to the different hospitals in their corresponding provinces by the Habilitation and Quality department.

#### **ACHIEVEMENTS**

Handing in of the adjusted software for managing the Habilitation and Quality database of the Healthcare Service Providers –PSS-throughout the country, as well as technical support during the test period and the tools' adjustment according to the needs of the Habilitation Department of SESPAS Central.

1.3. SUBPROJECT EPIDEMIOLOGIC SURVERILANCE AND COLLECTIVE HEALTH				
GOAL	Strengthen the system of gathering and registration of epidemiologic information in SESPAS Central and the five Provincial Health Offices (DPS) in Region V.			

The implementation of the electronic formats of the 67A, 72-A forms and the one on immunizations was completed in the five Provincial Healthcare Offices (DPS) and the fourteen public hospitals of the Region V. Parallel to that the recollection and consolidation of information for the years 2004, 2005, 2006 and 2007 was initiated. These registers can supply information on access and productivity of the healthcare services and the human resource productivity in the public hospitals of Region V and can present it as consolidated information, averages and graph tendencies.

The Project is supporting presently the development of a software tool for the registration, automatic elaboration and generation of a database form the birth certificates of the born alive babies in the public hospitals, as a response to the request made by the Statistics Department of SESPAS Central and CERSS. This tool will help make automatic the newly born babies register and will feed at the same time the Managing System of the Hospital-SIGHO-in order to get information which can help other programs, for example such as the immunization program. This tool is presently at a test stage in two of the hospitals of the Region. Upon completion of this phase it will be installed in the rest 12 hospitals of the Region and in 35 more around the country, using World Bank funding from its program destined to Support the Healthcare Sector Reform-PARSS.

#### **ACHIEVEMENTS**

- Monthly registration of the information from the forms 67-A, 72-A and the Immunization record since 2004. Database of consolidated information, averages and tendencies.
- The statistics personnel in the public hospitals and the DPS can handle the tool.
- Handing in and testing of the New-born alive Software in two of the public hospitals before their implementation on the rest of the entities of the Region and in 35 more hospitals throughout the country.

# COMPONENT 2: HEALTH CARE DELIVERY THROUGH DECENTRALIZED NETWORKS

The consolidation stage of the managerial tools started in the last trimester of 2007. It includes the installation and the initiation of the application, supporting the Client's attention, called **SIGHO**: Hospital Administration Integrated System. It will allow the registration of all the different types of services the client receives in the hospital, for example: medical procedures, diagnostics, medicine and materials, peri-natal clinical history and delivery care, HIV-AIDS clinical history of the attention received in this program, immunization record, hospitalization and discharge record, surgeries done, ambulatory care cases, new-born alive register among others.

This application will also serve to apply statistics register to those services, and will help the process of billing the services to different ARS, and the biggest among them SENASA. It will also be a helpful tool in the decision making process in themes such as administration of services and supplies by the institution. The testing period of this tool is over and it is expected to be gradually implemented in the rest of the hospitals of the Region V before the termination of the Project's execution.

Parallel to this process another one is carried out: the installation, amplification and remodeling in some cases of the informatics networks of the 14 public hospitals of the Region V as well as the purchase of equipment, such as servers, work stations, back-up systems, printers and emergency systems for electric supply to the informatics network.

The Service, Cost Policy and Budgeting Portfolio tool will terminate its development in the fourth trimester of 2007 with a final evaluation. There were adjustments and revisions being done to the information submitted by the fourteen hospitals, and once this process is over the elaboration of the final consolidation reports will be left.

The implementation of the Materials and Supplies Administration tool is over in all of the public hospitals of the Region V. This process was finalized with the awarding ceremony of the best projects and followed by study trip to Colombia to observe similar processes in public and private institutions involved in the social security system of the country.

The Biosecurity component finalized its implementation in all of the phases which were projected. The evaluation of the Final Disposal and Managing of the Hospital Residues tool was done in July of 2007 with the participation of an international consultant.

Considerable advances were achieved in the development of the Delivery Rooms Certification tool, directed by a local consultant. This activity aims at establishing the actual situation of the delivery rooms of the public hospitals of the Region V, as a base to propose improvements and action plans in the future. Once it was over, the two Projects: REDSALUD and CONECTA, in a joint effort, started training the physicians and the nurses working in this area of the hospitals in Emergency Obstetrics Care-COEM- issues.

2.1 SUBPROJECT INTEGRAL AND EFFICIENT ADMINISTRATION OF SUPPLIES				
GOAL	Strengthen the planning, administrative and supervisory capacity to deal with resources: human, physical and financial, in the 8 of the 14 hospitals, in order to improve their efficiency, efficacy and quality of attention to their patients and the beneficiaries, enrolled in the Social Security General System			

The implementation of the Materials and Supplies Administration tool was completed with the unfolding of its second and third phase. It focuses on improving the process of storage, register, purchase and delivery of medicine and disposables for the 14 public hospitals, the 5 DPS and the DRS of the Region V.

The tool was very well accepted and a team of people participated in its implementation: a local consultant and five tutors. Its software support tool was also tested, being a part of SIGHO. There is a funny fact about this tool: one of the hospitals' Administrators applied the process of storage control in her home to be able to monitor better the provisions monthly consumption.

The SIGHO tool completed its testing period in two of the public hospitals and it will be implemented in the rest of the Region's entities. Presently, it was introduced in two more hospitals.

At the same time the installation, amplification and remodeling of the informatics networks of the public hospitals was initiated, which support the functioning of the SIGHO tool and allow connection among different areas of the hospital. This will help the register and control of the real time of the attention offered to the clients and thus contribute to a more efficient process of registering and billing to SENASA and the rest of the ARS, the hospitals is working with, and eventually reduce the time patients wait for getting different services.

All the managerial tools and their informatics' applications developed so far by the Project and used in the Clients' attention process are being consolidated in the SIGHO informatics application. Here are some of them: **SAMI**: Mother-child Service System, **RIV**: Personal Immunization Register, **SUMINISTROS**: Materials and Supplies Administration, **HISTOCLIN**: The system of clinical records management. It also includes a module on healthcare service billing and will have statistics tools available for different areas, such as administrative, financial and epidemiologic. There were trainings and presentations offered to the final users of the different modules of this tool, as a part of this process.

The Service, Cost Policy and Budgeting Portfolio tool is in its phase of final revision by the hospitals and the results will be presented in the fourth trimester of 2007. There were certain difficulties in the interpretation of the information submitted by the hospitals, which led to postponing the evaluation and final presentation with 3 months. The data introduced by the Cost Committees of each hospital will be revised and adjusted during that period. The development and the follow-up of this tool are being supported by eight tutors.

- Installation of the Administration Integral System SIGHO software and their testing in the hospitals of Ramon Santana, La Romana, Hato Mayor and Musa.
- Implementation of the Materials and Supplies Administration tool in the 14 public hospitals of Region V, 5 DPS and the DRS. Approximately 150 people trained.
- Revision and consolidation of the information received through the Service, Cost Policy and Budgeting Portfolio tool in the 14 hospitals.
- Study trip to Colombia as a result of the final evaluation of the Materials and Supplies Administration tool, 10 participants.

- Remodeling, amplifying and installing three computer networks.
- Training 70 people in managing the SUMINISTROS software
- Training 30 people in managing the SAMI software.

2.2 SUBPROJECT ON BENEFITIARIES ADMINISTRATION, QUALITY AND ACCESSBILITY				
GOAL	Strengthen the information-registering capacity, the attention-to-the-client process and the improvement of the quality in 8 of the 14 hospitals in order to maximize their potential of providing client-oriented services.			

The program on improving the healthcare services in the area of Mother and Child care, terminated in July 2007. It was developed in a joint effort with CONECTA Project and was directed at evaluating of the functioning, equipment and the physical structure of the delivery rooms in six public hospitals of the Region V. Training of the personnel working in that area was offered too.

A training program was provided in Emergency Obstetrics Care-COEM- in five of the hospitals of the Region. The medical personnel: physicians and nurses were trained in methodologies of resolving possible emergency situations which might come up during the process of labor.

The program had so far good acceptance in the participating hospitals and has shown encouraging results. There is already a perception of improvement of the indicators for the maternal and infant deaths. Three tutors were supporting this program and they served as trainers for the rest of the selected hospitals.

The consultancy "Delivery Rooms Certification" was finalized in May of 2007 with a presentation of the achieved results. It shows important advances as well as the need of adjustments as far as physical structure, equipment and following the clinical protocols for maternal care are concerned.

Re-engineering of the process of "Management of the Client's Attention" was applied in the hospitals of Ramon Santana and La Romana with the goal of observing the flow of patients from their initial hospitalization until their discharge and thus be able to introduce improvements which will affect the service quality and the clients' satisfaction.

This process will be implemented in the rest of the public hospitals of the Region during the last trimester of the current year. There are also trainings offered to the medical personnel in quality and clients' service, complementary to the process of client's attention.

The award ceremony for the contest on "Management of the Hospital Waste and its Final Disposal" took place in April, 2007. This activity served as an evaluation of the entities, meeting the minimum of requirements for the contest and was in charge of the International Consultant Martha Cielo Gutierrez. The awards consist in getting an international internship to learn about the managing of hospital waste in countries with similar conditions.

#### **ACHIEVEMENTS**

- Eleven workshops have been executed, offering training to 280 people on quality and client service.
- Five delivery rooms have been evaluated in the hospitals of the Region V.
- 100 people have been trained in Emergency Obstetrics Care (COEM), from the hospitals of Miches, Guaymate, Nuestra Señora de la Altagracia and Ramón Santana.
- Approximately 30 people have been trained in the new process of offering attention to the users.
- International internship in Colombia for 13 people in managing and final disposal of hospital waste.
- Initiating a re-engineering process to the management of the process of the Client's Attention in the hospitals of Ramon Santana and La Romana

2.3. SUBPROJECT STIMULATING THE INVESTIGATION PROCESS AND THE HUMAN RESOURCE FORMATION				
GOAL	Strengthen the managerial capacity of the personnel in the 14 public hospitals of the Eastern Region, so that they get ready for the implementation of the Health Reform through continuous education of minimum 45 new students in the post-grade training; 8 supervised field-experiences and 10 short-term internships in Colombia			

The fourth group of graduates of the post-grade course "Management of Healthcare Services and Social Security" completed their training in April, 2007. The fifth group started their classes in August of 2007 with 18 participants.

Two diploma-courses were executed under the joint supervision of the INTEC University and the CES University on Healthcare Insurance and Auditing of the Healthcare Services. They initiated in November 2006 and terminated in February 2007.

The "TUTORS IN ACTION" Program completed training for the tools: Materials and Supplies Administration (5), Quality (10), Delivery Rooms (3). The training in "Healthcare Services, Cost Policy and Budgeting Portfolio" (8), OAU-Client's Attention Office (1) are still going on.

The training in "Informatics" was started in September of 2007, counting with 14 government officials from the institutions in Region V. The objective is to present them the new program as well as help them get acquainted with the new tasks they will have to execute in the hospitals. This training aims at providing the hospitals with a basic informatics support to be able to resolve immediately problems in that area as well as to avoid complications which might affect the provision of services to the patients and registering correctly the services.

It is a great honor for the Project to have tutors whose work has overcome all the expectations, as in the case of Dr. Griselda Roy, tutor in OAU. She was contracted by the Bani Hospital to execute the cleaning and reorganizing of the clinical records archive of the hospital. This came as a result from the excellent work she had done in the Dr. Antonio Musa Regional Hospital.

#### **ACHIEVEMENTS**

- 41 people participating in the program Tutors in Action from which 18 completed their work, 9 will continue for a few more months and 14 will join the program as new participants.
- 18 people from the Eastern Region completed their training in the post-grade course "Management of the Healthcare Services and Social Security"
- One tutor contracted for a job by a different organization in a different region.
- 41 people from the diploma-course on Healthcare Insurance and Auditing, organized by INTEC and CES got a sponsorship equal of 60% of the total cost of the course.

#### **COMPONENT 3: RISK AND INSURANCE MANAGEMENT**

The process of supporting SENASA in defining the manuals of diagnostics codes, procedures, medications and disposables, as well as their payment and employment mechanisms and auditing of the healthcare services is finalized. Those elements are gradually being incorporated in the new managerial tool SIGHO, used by the hospitals. Its final goal is to unify the criteria of these entities when of patients' attention is offered or for registering and billing the healthcare services. Thus, the public hospitals of the Region V could bill their services to the Subsidized and the Contributive Regime to SENASA or other ARS.

3.1 SUBPROJECT MANAGEMENT OF RISK AND INSURANCE					
GOAL	Strengthen the planning, implementing, managing and supervising capacity of the National Social Security Organization (SENASA) in order to be able to lead a general insurance program.				

The consultancy Basic Sets of Healthcare Services, led by the internationals consultant Alvaro Lopez is finalized. It aimed at supporting SENASA in the definition and the creation of codifying system, developed for the diagnostics, procedures, healthcare services, materials and supplies, which come up during the process of attending their beneficiaries. The codified register of services and diagnostics will be the basis for the statistic analysis of risk in the insurance of any ARS. These codes were developed using international standards which are a requirement nowadays and which the Healthcare Superintendence places for all ARS operating throughout the country. They will also be used in the hospitals for their billing process of the healthcare services and the registration of information on the attention provided.

The codifying system, developed for the diagnostics, procedures, healthcare services, materials and supplies, will be introduced into the software of the Hospital Administration Integrated System, SIGHO in order to improve the registration of information and also facilitate the process of billing the services to SENASA and the rest of the ARS-public and private.

- Manual with the basic set of codes for diagnostics, procedures, healthcare services, materials and supplies, using international standards.
- Incorporation of the codes for the diagnostics, procedures, healthcare services, materials and supplies into the software of the Hospital Administration Integrated System, SIGHO. They will be used to register and bill the healthcare services as well as to generate pertinent information on the management of healthcare risk.
- A model for hiring and auditing healthcare services

#### **COMPONENT 4: SOCIAL PARTICIPATION AND VIGILANCE**

DIDA executed training on the duties and rights of the beneficiaries of the Subsidized Regime of the Healthcare Social Security System and to community based groups, supported by the REDSALUD Project, according to a cooperation agreement with that entity signed in 2005.

The formation, training and swearing-in of the 13 Hospital Administration Councils from the 13 public hospitals in the Region V are completed. This process was led by a local consultant and was supported by the active participation of different community based groups.

4.1 SUBPROJECT STRENGTHENING OF THE COMMUNITY-BASED GROUPS				
GOAL	Thirty community-based organizations of the Region will perform their roles of managers, supervisors and consumers within the Health Reform.			

A variety of activities on information, education and training have been offered to community based groups of the Eastern Region, as stipulated in the cooperation agreement with DIDA. The focus of these activities was to train the participants in themes related to their duties and rights as users of the new Healthcare and Social Security System, as well as to how it functions in general and how to be able to evaluate the opportunities offered within the healthcare services network.

- Approximately 49 people were trained in auditing and social supervision.
- A one day-training was offered to community based groups related to their role as social supervisors within the new system of healthcare social security.
- There were four meetings prepared to evaluate the quality and the adequacy of the, services offered by the public healthcare service network, reaching 564 people.
- Approximately 941 people were trained in their duties and rights as users of the new Healthcare and Social Security System, in healthcare service providing and networking and in themes related on how to use the healthcare system.
- There were 17 meetings/trainings with different community based groups.
- A forum was organized on themes related to the Health reform in the Region V in which participated different community leaders (approximately 150 people).

4.2 SUB-PROJECT TRANSPARENCY PACTS AND GIVING ACCOUNT OF THE ACCOMPLISHED				
GOAL	Eight hospitals of the Region will develop and implement tools and mechanisms to gain transparency and account of the accomplished			

The termination of the joint work done with the Project: "Justice and The Ability To Govern", the hospitals finalized their process of giving account of the accomplished. Nevertheless, the Project keeps working on the development of tools, which can contribute to the transparency in the services management and in the use of public resources. A fundamental part of this area is the information system as well as the Hospital Administrative Councils.

In this sense we can perceive the value of a software tool that is being developed which can register the services offered per hospital, physician and healthcare service and which can let the community and the Hospital Administration Councils observe the development of those institutions as far as managing healthcare services and resources is concerned.

The process of social control was strengthened through collecting and analyzing on a periodic base the complaints and the recommendations given by the healthcare services users. They have been evaluated periodically by a committee with the participation of members of the local community. The surveys on evaluating the users' satisfaction with the services were also carried on and their results were analyzed and presented to the directive committees of the hospitals.

This information is a part of the public report of their administration, which have to be shared with their communities by placing them in readily visible areas in the institutions and are discussed in such events as those of giving account of the accomplished.

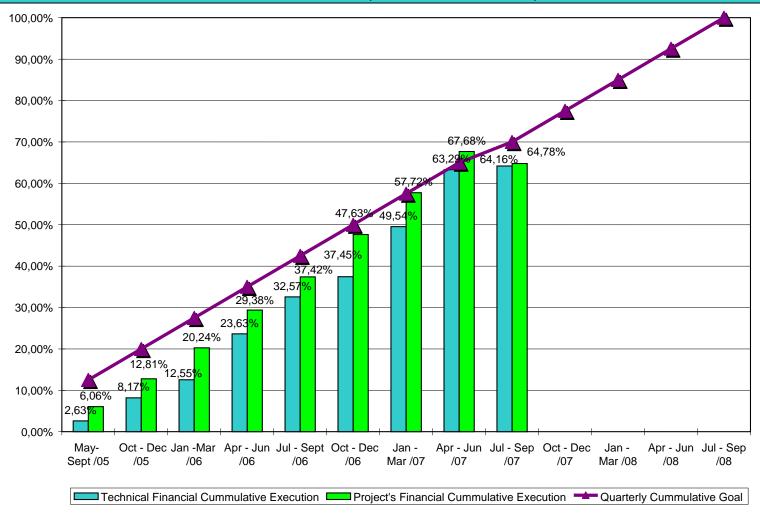
- Advance in the development of different software tools to support the information database on institutional administration, services and supplies.
- Supporting the process of organizing and training the Hospital Administration Councils in the fourteen public hospitals of the Eastern Region.
- Strengthening of the Offices of Client's attention and the process of collection and response to complaints and recommendations.
- Executing and analyzing the results of surveys evaluating the customers' satisfaction.

4.3 SUBPROJECT HOSPITAL ADMINISTRATION COUNCILS				
GOAL	Eight hospitals in the Region will initiate the process of formation and operation of their Administrative Councils.			

The process of formation of the 13 Hospital Administration Councils-CAH- was completed with the swearing-in ceremony of its members led by SESPAS Central. This is a mechanism through which a better accountability for the accomplished and transparency of the administration of the hospitals could be achieved. In this process the community can participate using these councils as a direct channel of communication in its function of social control over the manner the hospital manages its services and resources in order to provide healthcare attention to the communities.

- Execution of seven modules for the training of the Hospital Administration Councils members.
- Formation and swearing in of thirteen Hospital Administration Councils –CAH.
- Training of 70 members of the CAH of the thirteen hospitals

#### III. TECHNICAL AND FINANCIAL BUDGETARY TENDENCY, REDSALUD PROJECT, 2005-2008



#### IV. GENERAL ENTRIES OF THE BUDGETARY EXECUTION, REDSALUD PROJECT, 2005-2008

July- September 2007

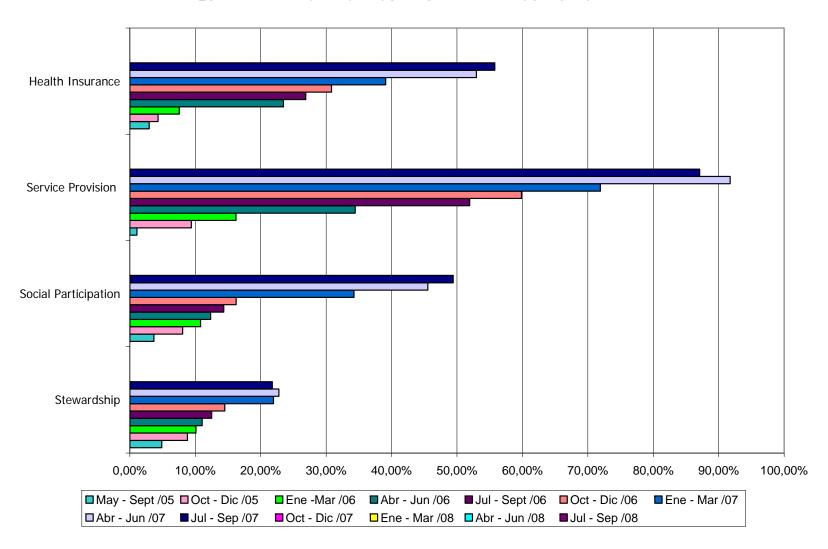
GENERAL BUDGETARY ENTRIES	TOTAL BUDGET US\$	TRIMESTRAL EXECUTION US\$			ACCUMULATED EXECUTION US\$		
LIVINIES	BODGET 03\$	PROJECTED	EXECUTED	% ACHIEVEMENT	EXECUTED	% ACCUM.	% LOP
LABOR	\$1.127.732,00	\$84.579,90	\$86.891,62	102,73%	\$728.277,79	64,58%	70,00%
FRINGE BENEFITS	\$473.648,00	\$35.523,60	\$36.494,64	102,73%	\$305.877,14	64,58%	70,00%
OVERHEAD	\$339.506,00	\$25.462,95	\$25.566,14	100,41%	\$217.684,16	64,12%	70,00%
CONSULTANTS	\$185.276,00	\$13.895,70	\$26.028,95	187,32%	\$137.430,90	74,18%	70,00%
TRAVEL AND PER DIEM	\$125.372,00	\$9.402,90	\$39.763,40	422,88%	\$91.828,92	73,25%	70,00%
ALLOWANCES	\$342.387,00	\$25.679,03	\$47.372,55	184,48%	\$222.905,54	65,10%	70,00%
OTHER DIRECT COSTS	\$1.418.987,00	\$106.424,03	\$196.319,03	184,47%	\$917.118,42	64,63%	70,00%
EQUIPMENT	\$212.861,00	\$15.964,58	\$51.797,13	324,45%	\$128.418,38	60,33%	70,00%
SUBCONTRACTORS	\$1.287.491,00	\$96.561,83	\$78.615,01	81,41%	\$741.001,47	57,55%	70,00%
OTHER INDIRECT COSTS	\$871.686,00	\$65.376,45	\$83.113,79	127,13%	\$549.679,43	63,06%	70,00%
TOTAL ESTIMATED COSTS (Exclusive of Fee)	\$6.384.946,00	\$478.870,95	\$96.205,67	20,09%	\$3.464.465,56	54,26%	70,00%
FEE	\$415.022,00	\$31.126,65	\$49.930,91	160,41%	\$268.616,84	64,72%	70,00%
TOTAL ESTIMATED COST PLUS FEE	\$6.799.605,00	\$509.997,60	\$817.934,80	160,38%	\$4.404.750,34	64,78%	70,00%

#### V. BUDGETARY EXECUTION ACCORDING TO THE TECHNICAL COMPONENTS, REDSALUD PROJECT, 2005-2008

July- September 2007

GENERAL BUDGETARY ENTRIES	TOTAL BUDGET US\$	TRIMESTRAL EXECUTION US\$			ACCUMULATED EXECUTION US\$		
		PROJECTED	EXECUTED	% ACHIEVEMENT	EXECUTED	% ACCUM.	% LOP
STEWARDSHIP AND COLLECTIVE HEALTH	\$456.266,21	\$34.219,97	\$15.346,71	44,85%	\$99.355,10	21,78%	70,00%
SOCIAL PARTICIPATION	\$603.193,65	\$45.239,52	\$56.675,13	125,28%	\$298.114,75	49,42%	70,00%
SERVICE PROVISION	\$1.382.856,44	\$103.714,23	\$298.709,32	288,01%	\$1.204.439,20	87,10%	70,00%
INSURANCE	\$414.518,54	\$31.088,89	\$38.578,42	124,09%	\$231.153,63	55,76%	70,00%
TOTAL GENERAL	\$2.856.834,83	\$214.262,61	\$409.309,58	191,03%	\$1.833.062,68	64,16%	70,00%

#### QUARTERLY TECHNICAL CUMMULATIVE EXECUTION CHART



#### VI. INDICATORS

The project stipulated to use as a basis for the evaluation of its activities, indicators that have a greater direct impact, in reference with the introduction of the Health Reform in the country and the work carried on in improving the management of resources and the services quality in the public hospitals. These indicators are:

**Access:** measures the variation of medical consultations and last doses of the pentavalent vaccine. To be measured semi-annually.

**Productivity:** measures the performance of the medical personnel through the ratio of the number of doctor's consultations per hour/doctor's service contracted. This indicator will be formally measured using the hospital's medical registries in 2004, 2005, 2006 and 2007.

**Milestones:** measures the percentage of accomplishment of the Reform's most important facts during the implementation of the health reform process. These important facts are:

- Initiation of the Social Security Subsidized Regime in the 5 Provinces of the Easter Region.
- Health Services Portfolio defined by municipality
- # of defined and identified Subsidized Regime beneficiaries
- Completion of the beneficiaries' data base
- Beneficiaries' ID cards completed
- Service provision contracts signed with all healthcare service providers entities (PSS)
- Health provision network defined per ARS (SENASA)
- Established and functioning billing process in each PSS and ARS (SENASA)
- Implemented technical, operative and administrative procedures for the hiring of auditory services between SENASA and the PSS.
- Functioning administrative and financial management mechanisms in SENASA and the PSS.

This indicator will be measured in 2006 and 2008 through a survey directed to a focus group made of the major actors in the system. It was also modified by adding few more parameters, related to those used during the first phase of REDSALUD.

**Perception:** measures the Subsidize Regime beneficiaries' level of satisfaction with the quality of services, provided by the hospitals and the health establishments of the Region V. It will be measured once-: in April, 2007, through a survey applied to the users of Region V health services, the same as the one applied in 2002, 2003, and 2005.

**Management:** evaluates the perceived healthcare providers' capacity for management of the establishments that are being evaluated in the

Region V. The aspects of interest are: management of the human resources, planning, leadership, quality control, marketing, information system handling, communication mechanisms within the institutions, and social participation. This indicator will be measured once- in April, 2007, through the survey elaborated for this purpose, the same as the one applied in 2002, 2003, and 2005.

#### Autonomy:

evaluates the perceived development in the decision-making capacity of the Region V institutions without the influence of outside actors, considering such aspects as: human resources management, planning, quality control, marketing, information systems handling, etc. This indicator will be measured once - in April, 2007, through the survey elaborated for this purpose, the same as the one applied in 2002, 2003, and 2005.

#### Context:

evaluates the progress of the three principal indicators, measuring the general impact of the health policy. The first one is the probability of being ensured, the second-the probability of accessing healthcare services when required and the third one-expenses a household is having on healthcare services in its proportion to its overall income. These three indicators will be measured by quintiles of income in all of the nine regions of the country. The ENDESA (National Health Survey) surveys from 1996, 2002 and 2007 will be used for this purpose. The first two will serve as a base-line to compare later the progress in the healthcare system. The report will be available by the end of 2008.

#### **INDICATORS OF ACHIEVEMENT**

#### July-September 2007

INDICATORS	BASE-LINE 2002	2003	2004	2005	2006	2007 <sup>1</sup>	GOAL 2007
ACCESS <sup>2</sup>	72.80%	73.20%	84.36%	76.77%	80.13%	76.30%	85.00%
PRODUCTIVITY <sup>3</sup>	N/A	N/A	2.70	2.40	2.36	2.57	3.00
MILESTONES <sup>4</sup>	N/A	N/A	N/A	N/A	59%	N/A	61.00%
PERCEPTION	69.70%	71.50%	N/A	54.80%	N/A	72.50%	85.00%
MANAGEMENT	10.20%	13.90%	N/A	14.00%	N/A	24.00%	20.00%
AUTONOMY	34.10%	40.60%	N/A	40.40%	N/A	70.80%	45.00%
COVERGE <sup>5</sup>	N/A	N/A	N/A	19.34%	43.73%	66.34%	80.00%

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<sup>&</sup>lt;sup>1</sup>The 2007 data is being estimated until September

<sup>&</sup>lt;sup>2</sup> The access data for 2007 experienced a drop due to the immunization coverage which experienced lack of vaccines during the first trimester. Nevertheless, there was an increase of the medical consults

<sup>&</sup>lt;sup>3</sup> The productivity is a sum of the medical consults, emergency care cases and immunizations; the indicator for 2004 changes due to new data, handed in by the hospitals.

<sup>&</sup>lt;sup>4</sup> The Milestones survey was updated in 2006

<sup>&</sup>lt;sup>5</sup> The Coverage indicates the number of Subsidiary Regime beneficiaries related to the total number of people in poverty estimated for Region V.

## PERCEPTION OF THE MANAGEMENT AND AUTONOMY INDEX REDSALUD PROJECT 2005-2008

# The results from this survey are measuring the perception of different executives on the managerial capacity and level of autonomy achieved by the institutions in Region V

The survey on the perception of the managerial capacity and autonomy, applied to the principal executives of the institutions in the Region V was carried through the months of May to July of 2007. This is the fourth of a series of surveys executed in 2002, 003 and 205, which will permit to analyze the changes affecting these processes over a period of 5 years.

The analysis is being done evaluating the behavior of certain milestones and major facts in the area of management and institutional autonomy. They will permit later on to elaborate an indicator which summarizes the behavior of 59 variables, used to evaluate the areas under investigation. Data is obtained by applying the survey to three (3) executives from the highest hierarchy, according to the organizational chart of the 14 public hospitals, five Provincial Healthcare Offices and the Regional Healthcare Office, making up a total of 20 healthcare institutions under SESPAS regulations in the Region V to be evaluated.

The results after constructing the Global Index of Perception of the Managerial Capacity and Autonomy (IGP) and analyzing key variables in different studies lead to the following conclusion: the Region V institutions under study, have experienced positive changes in the manner they had accustomed to execute their management for the period of 2002-2007 according to the executives' opinion.

Here are some of the results which and prove the above written statement:

In 2007 all the institutions have defined and have in writing their mission and the vision, a repetition for some institutions which had had it back in 2002. This task gives an individual and collective sense to the undertaken actions (mission), and defines the strategic direction to be followed (vision). The institutional mission and vision are exposed in a visible place in 16 of the 20 visited institutions.

The percentage of executives who inform their institution has a tool, guiding their actions grew from 70.2% in 2002 to 82.3% in 2007. This past year 19 from the 20 centers under study formulated their Operative Plan.

The use of the Customers Satisfaction Surveys became an institutional chore for the past five years. Presently (2007), 18 out of 20 institutions are using this tool as a service quality control mechanism, while back in 2002 there were only two institutions doing that.

The interest for improving the human resource management is also evident. Presently 11 institutions are questioning their staff on the level of their satisfaction in the workplace, thus showing they multiplied five times as back in 2002 there were only 2 institutions doing that.

The institutions do not limit themselves to asking only about the levels of employees' satisfaction. They have gone further improving the workspace and supplying adequate equipment. 95.2% from the questioned executives informed they had done improvements both in the physical structure and the equipment. They have started to monitor also the staff's performance and to sanction or reward the results obtained through evaluations. 40.3% of the executives state there are different tools used to evaluate the accomplishment of the planned activities. A similar percentage informed on the existence of Disciplinary Councils and half of those have undergone certain changes.

A great challenge still to be tackled is the hiring process for the human resources in the public sector. The normative for selecting personnel for 98.0% of the surveyed people is still "political recommendation as well as other level recommendations".

The process of buying and selling of healthcare services has also notorious advance, even though it has passed through great challenges. The last survey reports 29.0% of the executives affirming there is an area of buying and selling services in their institutions while back in 2002 this percentage was only 6.9%. 77% of the institutions have their healthcare service portfolio in writing which is also considered a remarkable progress.

So, it can be stated in conclusion that according to the IGP the improvement of the managing capacity is notorious. This index value for the Region V raised in its totality from 22.1% in 2002 to 63.7% in 2007 and with its adjustment due to the level of verification still maintains a tendency of growth, increasing from 11.7% to 28.2% during that period.

The provinces with a higher value than the average regional IGP are La Romana (23.8% in 2002 and 67.5% in 2007) and San Pedro de Macoris (from 21.5% in 2002 to 66.2% for the same period).

Regarding the stewardship in this system of local institutions, the Provincial Healthcare Office in San Pedro de Macoris and the Regional Healthcare Office showed best performance in 2007, moving the La Romana DPS from the first place in 2005, according to the value of the IGP.

The first four places belong to the following healthcare service providers: Municipal Hospital-Miches, Dr. Francisco A. Gonzalvo Hospital-La Romana, Nuestra Señora de la Altagracia-Higuey and Dr. Alejo Martinez-Ramon Santana. These healthcare centers surpassed the performance level reached in

2005 by the Dr. Leopoldo Martinez Hospital-Hato Mayor, which got the first place that same year.

Finally here are some recommendations in order to strengthen the development of certain aspects and eventually contribute to improve the situation of the institutions:

- To advance in making automatic the informatics' systems both the clinical and the financial
- In establishing systems to determine service charges
- In methodologies for the analysis of competencies
- In the use of tools in handing in incentives to the providers
- In the transition of the financing of the services provision from offering to requesting.

## PERCEPTION OF THE SERVICE QUALITY INDEX REDSALUD PROJECT 2005-2008

The results from this survey are measuring the perception of the quality of the healthcare services among the beneficiaries of the services of ambulatory care, immunization and emergency care consults in the 14 public hospitals of the Region V.

The survey on the perception of the healthcare service quality was executed during May of 2007 as a probabilistic sample of 680 beneficiaries of the ambulatory service, immunizations and emergency care in the 14 hospitals of the Ministry of Health and Social Assistance in the Region V or the Eastern Area of the Dominican Republic. There were three similar surveys done among the beneficiaries using a sample of 90 healthcare institutions in 2002, 2003 and 2005.

The analysis presented in this work is based on comparing the behavior of four key aspects included in the survey, done in the 14 hospitals: waiting time, attention by the personnel who offered the healthcare service, waiting room physical conditions, and opinion on the time-schedule of the healthcare service. Another one was added, which is a general evaluation of the received services by the beneficiaries done spontaneously. The index created and based on those investigated variables was named "Index of the Customers' Satisfaction"-ISU.

The result of the test on difference of measurements, t as student, showed an increase of the Index of the Customers' Satisfaction from 69.7% in 2002 to 72.5% in 2007 as a general average for the 14 hospitals. This is a significant achievement, considering the limitations, which those institutions are constantly facing.

According to some specific aspects of the survey, the percentage of people stating they will go back to the center where they got healthcare services, is over 90%, and the one on recommending this center to other people is over 85% for the evaluated period.

The change however did not occur always in the same direction neither was it equal in magnitude for all of the healthcare centers. The hospitals which achieved the best performance over these five years are the Dr. Francisco A. Gonzalvo in La Romana and Dr. Alejo Martinez in Ramon Santana. The results from the applied statistics sample show an increase of the Index of the Customers' Satisfaction from 70.3% to 80.7% in the Dr. Alejo Martinez Hospital and from 69.2% to 81.5% in the Dr. Francisco Gonzalvo, both being highly significant.

In a similar manner not all of the participating healthcare centers showed the same behavior as far as different statistics variables are concerned:

Even though the waiting time keeps being a problem pending to be resolved, 40% of the patients in the hospitals of the provinces of La Romana, Leopoldo Martinez - Hato Mayor, Lagunas - Nisbon, Evangelina Rodriguez –San Rafael de Yuma and Alejo Martinez-Ramon Santana, responded that they were attended within the first half hour after arriving in the healthcare center. Over half of the customers of the healthcare services in the municipal hospitals of El Valle, Miches and the regional one Dr. Antonio Musa, had to wait one hour or more to be attended.

There are also differences in the interpersonal communication (provider-patient), every nine out of ten customers stated the healthcare personnel greeted them before providing the service and also let them ask questions and express doubts and concerns. 90% of the customers stated they were received with a greeting in the hospitals Dr. Alejo Martinez, Dra. Evangelina Rodriguez and the Municipal Hospital of Miches. The worst rated hospitals according to this criteria are the Regional Hospital Dr. Antonio Musa and Srta. Elupina Cordero Hospital –Sabana de la Mar.

The physical conditions of the waiting rooms were evaluated in a positive manner in general: nearly everybody (97.3%) considered that the area they were waiting was protected from sunshine and rain; over 80% stated the place was comfortable, clean and well organized. Three out of every four people said they found agreeable the size, the climatic conditions and the illumination of the area. The customers recommend these areas to be provided with visuals: something to watch, look at or some type of entertainment according to the audience, as only one third of the people responded they found something of the kind. The best healthcare center in this sense seems to be the Municipal Hospital of Miches as 90% of its customers responded that they found something to look at, read or entertain them.

The time-schedule of the healthcare centers seem not to be of concern to the customers, as they consider the emergency care ward as an alternative to resolve healthcare problems and as it is available 24 hours per day. Nevertheless, 63.4% consider it would be very convenient to count with healthcare services during the weekends and 52.9% consider the starting time of the provided services makes it difficult for them to attend.

The general evaluation of the 14 public hospitals made by the customers was positive. 88% of the people questioned during the survey, stated to be satisfied with the received services. 92% responded they will go back there again to look for healthcare services and 90% said they will recommend the center to a relative or a friend. The best evaluated hospitals in this sense are the municipal hospitals of Ramon Santana, Miches, El Valle and San Rafael de Yuma, which got a favorable response from the majority of their customers. 90% of the customers of the Dr. Francisco Gonzalvo Provincial Hospital, the Guaymate Municipal Hospital, Dr. Leopoldo Martinez of Hato Mayor and Dr. Pedro Maria Santana of Los Llanos expressed they feel completely or mostly satisfied with the healthcare services they received.

#### MILESTONE SURVEY 2006 PROJECTO REDSALUD 2005-2008

#### **Parameters and Averages**

1	Health and Social Security Reform Progress			
2	Healthcare services Portfolio-defined, standardized and up-dated	0.62		
3	Existing Database of the Subsidiary Regime Beneficiaries	0.73		
4	Subsidiary Regime Affiliation Process	0.38		
5	Process of issuing ID cards to the beneficiaries	0.71		
6	Signed contract between Hospitals and SENASA	0.71		
7	Service Network- System of Reference and Counter-Reference	0.60		
8	Existing manuals for medical clinical, technical and operative procedures	0.62		
9	Existing manuals for administrative procedures	0.60		
	Number of presently enrolled beneficiaries (Potential beneficiaries to be enrolled in the 95,000 system up to date of evaluation 250,000)	0.38		
	General Average	0.59		

#### **PRODUCTIVITY**

The index of productivity is an indicator showing the number of activities executed per hour, referring to three different healthcare services in the hospitals: consults (general and specialized), emergency care cases and number of applied vaccines.

The productivity in the out-patient consults equals the sum of general medicine and different specialties consults, divided by the number of hour/physician completed to provide that service. The second considered healthcare service is the emergency care. It equals the sum of all emergency cases divided by the number of hours spent by physicians there. The third service is related to vaccines, sum of vaccines applied for a given period is divided by the number of hours the nursing personnel is contracted to provide the service. Some hospitals have more than one nurse employed to offer the service during the same shift.

Until recently the data we had for productivity for 2004 was 3.28. It was decided to calculate it again, based on data from that year's hospital registers, eve though it is little trustworthy, and the new information, provided by the hospitals, after applying again the cost policy tool.

Averages per province were calculated, in order to make the measurement and analysis of the indicator more practical. Different sources of information were used in order to compare results and obtain a more trustworthy and reliable information. The first table of cost policy was done in 2004, based on the indicators provided by the tool on "Healthcare Services, Cost and Budgeting Portfolio". The data on human resources was taken from there to be able to calculate the number hour/physician in general medicine, the different specialties and the emergency care. The numbers of hours for immunization were calculated based on the number of the hour/nurse assigned in each immunization post.

The information on numbers of consults and emergency care cases were taken from the cost policy table done by each hospital, elaborated using the managerial tool developed and implemented by the Project; the number of vaccines were taken from the physical register each immunization post has. The types of vaccines considered in calculating the vaccination indicator are BCG, Hepatitis, Polio, Pentavalent, DPT and Measles.

Average monthly indicator per each service was calculated per province and per year. A monthly total was also calculated (consults, emergency care, immunizations) per year and per province.

The productivity indicators were calculated in the following manner:

Monthly Productivity Indicator:

Number of Consults

Number of Hours/Physician, contracted to consult

# Number of emergency care cases Number of Hours/Physician, contracted in Emergency Care

Number of all Vaccines Applied

Number of Hours/Nurse, contracted in vaccine post

Indicator of the summarized average monthly productivity:

Sum of number of consults, emergency cases and vaccines done.

Hours/Physician or Nurse, contracted to provide those services

Below, there is a graphic presentation of the service productivity results and by province, comparing the years 2004, 2005 and 2006

#### PRODUCTIVITY OF CONSULTS 2004-2007 FOR REGION V. DR

Province	2004	2005	2006	2007
El Seibo	5,17	5,77	2,40	3.02
Hato Mayor	1,97	2,62	2,05	2.78
La Altagracia	1,71	2,55	1,83	1.94
La Romana	3,87	1,56	1,52	1.68
San Pedro de Macorís	2,09	1,89	2,93	3.44
Total Región V	2,64	2,20	2,18	2.58

Source: Cost Policy Table 2004 and form 67<sup>a</sup> (years 2005 and 2006)

The hospitals used 100% of the information hours/physician and number of consults from the cost policy tables for 2004 done applying the tool, implemented by REDSALUD. This data was taken from non-standardized and non-regulated registers in the hospitals. This is a reason to make us consider much of the data really divorced from reality.

In 2005 the  $67^A$  form was introduced to the hospitals for the register of consults. However the register was not done on a daily basis, or monthly in all of the hospitals. Old registers were looked up and information transferred in  $67^A$  forms. This can explain to a certain extent the differences in the numbers for 2004 and 2005 for all of the provinces but El Seibo, where the indicator persists for those two years.

In 2006, work has been done to create awareness about the importance of data registers and procedures done in the hospitals. Still few physicians and hospitals

were putting in data directly in the corresponding forms. This makes the data from 2006 most reliable an close to reality.

In average, the productivity doesn't vary much from year to year, even though there are such differences among the provinces themselves, as the provinces of El Seibo an La Romana have increased their indicators significantly, increasing in such a way the general index for 2004. The same tendency can be observed for 2005, for the provinces of El Seibo, Hato Mayor and La Altagracia, even though for the last two the change is milder than the first. The 2006 index is presenting a general standard for the provinces, which might be contributed to the awareness already perceived on data registration.

#### EMERGENCY CARE PRODUCTIVITY 2004-2007 FOR REGION V, DR

Province	2004	2005	2006	2007
El Seibo	2,56	2,21	1,35	1.40
Hato Mayor	2,14	1,87	2,84	2.59
La Altagracia	1,84	1,77	1,33	1.39
La Romana	2,04	1,58	2,21	2.29
San Pedro de Macorís	2,96	2,66	3,15	3.23
Total Region V	2,33	2,02	2,18	2.21

Source: Cost Policy Table 2004 and form 67<sup>a</sup> (years 2005 and 2006)

The information on Emergency Care was recollected in a similar manner to that of the consults: for 2004 – all the numbers came from the cost policy table; for 2005 and 2006 the hours/physician were obtained from the cost policy tables, done by the hospitals and the number of emergency care cases – from the 67<sup>A</sup> forms.

The general productivity varies from year to year and doesn't have a constant value for none of the provinces. It is assumed that due to the fact that the registered information was found already written and the calculations were done by the hospitals, this information can vary a lot. It depends on who collects it, as it is both physicians and auxiliary personnel that are in charge of registering and consolidating productivity information. Also it is based on the medical charts and the little that doctors write down as notes during their consults and attention in general.

That is the reason why it is considered that the Emergency Care Entries are much lower then reality. Another reason for this statement is direct observation in the hospitals: it is the Emergency Care Unit, which gets mostly congested as hospitalization begins there and it is also the place where most of the healthcare attention and procedures offered by the hospitals are started.

#### PRODUCTIVITY OF IMMUNIZATIONS 2004-2007 FOR REGION V, DR

Province	2004	2005	2006	2007
El Seibo	1,91	3,27	2,46	2.05
Hato Mayor	2,17	3,52	3,29	2.75
La Altagracia	4,75	5,89	5,00	5.68
La Romana	8,28	10,65	5,91	7.62
San Pedro de Macorís	7,89	6,19	5,03	4.95
Total Region V	5,35	6,02	4,61	4.77

Source: Immunization logs of the hospitals and the number of hours the personnel is being contracted by PAI Central

It is important to clarify from the beginning, that when we evaluate the productivity of immunizations, we are only referring to applied vaccines against: tuberculosis (BCG), hepatitis, polio, DPT, measles and the pentavalent vaccine. Also, it is important to realize, that one child can get more than one vaccination without necessarily dedicating more time then a normal immunization consult.

The productivity of immunizations increased in 2005 due to the fact that SESPAS, Central level organized immunization campaigns throughout the country, thus increasing the number of applied doses. It is also important to highlight that in 2005, the government authorized the increase of working hours for the personnel dealing with immunization in the public hospitals, as an attempt to offer that service in the pm shifts and improve its quality.

The greatest increase of the productivity of immunizations can be observed in La Romana. The reason for that is the fact that La Romana was the province with the lowest immunization indicator in the Region. This motivated an immunization campaign, initiated by the Dr. Fransico A. Gonzalvo Hospital and the Municipal Hospital of Guaymate in 2005.

They listed the child patients and the pregnant women and teenagers in every region. Then, they went to their homes to apply the immunizations, initiating or completing the schemes. During this process, a lot of mothers being without any registration anywhere joined the campaign and that also contributed to increasing the numbers. By the end of 2005 the La Romana province was totally up-to-date with the application of the necessary immunizations. The initiated home-visit immunization process is still constantly applied.

In San Pedro de Macoris, the numbers of applied doses was also increased in 2005. Their campaigns got the community leaders involved and in such a way mothers were motivated to take their children and get the immunization.

# COMPARING AVERAGE MONTHLY PRODUCTIVITY 2004-2007 FOR REGION V, DR

Province	2004	2005	2006	2007
El Seibo	3,40	3,67	1,92	2.20
Hato Mayor	2,07	2,32	2,43	2.71
La Altagracia	2,09	2,44	1,79	1.88
La Romana	3,16	1,98	2,09	2.23
San Pedro de Macorís	2,73	2,48	3,20	3.47
Total Region V	2,70	2,40	2,36	2.57

Source: Cost Policy Table 2004, form 67A and immunization post in each hospital

Even thought productivity shows a more or less constant annual average, it is important to point out, that from direct observation in the hospitals, the general productivity is perceived as much greater then calculated. This can probably be explained with the fact that the 2004 data for the number of consults was taken from the cost policy tables, and since then – from 67<sup>A</sup> forms, based on medical personnel "registered information" in the clinical records. The hospitals had no experience what-so-ever in registering data when the cost policy tool started to be implemented. This could have affected the data obtained using this tool. Another factor to be considered is the fact that the number of working hours in the contracts of the physicians is greater then the number of hours actually worked, making the indicator kind of fictitious, even though the hospitals are trying hard to register the real worked hours in the cost policy tool.

As it was mentioned above, the physicians have no traditions of registering numbers of writing down notes in the medical charts for the patients they have seen. This makes registering real data quite difficult. This could have affected the productivity indicator.

As of 2007 the 67A form was systematized in order to facilitate its use and the registering process. This gives us hope to have more reliable data for the calculation of the productivity indicators in the future.

#### VII. CONCLUSIONS AND RECOMMENDATIONES

The Family Health Insurance of the Contributive Regime was initiated of on September 1 even though there were certain difficulties due to lack of coordination of criteria and lack of adequate information in the different sectors and actors of the system. This, however is not a source of difficulties for the Project but rather an opportunity to improve and channel the efforts of the hospitals to improve their administration and thus achieve a better attention quality for their patients as well as for the their potential future new clients, such as the ARS or other companies wishing to buy the healthcare services from the public health institutions.

The REDSALUD Project initiated a phase of consolidation of managerial systems and tools, developed in earlier phases. To achieve that, SIGHO (Integral System of Hospital Management) was created. It is an informatics application interconnecting a whole variety of processes. The focus during this stage is the middle level administrative staff of the hospitals, who are working directly with the clients' attention. The top level executives, however, will also be involved as they will need to take the lead in the development of the new processes and the implementation of systems.

The results achieved after applying the Index of Global Perception on the capacity for Management and Autonomy (IGP) and the analysis of a number of key variables in the undertaken calculations, all that lets us conclude that the Region V healthcare institutions studied, for the period between 2002 and 2007 have experienced a positive change in their management.

In a similar way, the results from the measured difference –t as student- test, show an increase in the Index for the Customers' Satisfaction in 2007 - judging on the average for the 14 hospitals. This is a really significant fact, considering the limitations of the public healthcare institutions of Region V and the country in general.

There is a considerable advance in the number of enlisted beneficiaries of the Subsidized System in the Region as well as the increase of clients' numbers considering the initiation of the Contributive Regime throughout the country. This fact constitutes a big challenge both for the Project and for the supported entities. Even though the public institutions and specially the hospitals have made a significant advance in improving their responsive capacity and their service quality, this is a process which is starting just now and requires a continuous support in order to keep going.

"TUTORES IN ACTION" strategy has demonstrated to be of vital importance for the Project as it supports the implementation of the tools, helps the personnel assume them as their own and continuously shows positive results as the Tutors are becoming agents, multiplying the processes of change.

The fact that different public and private institutions are interested in getting to know and/or implement the managerial tools developed by the Project and directed to improve the administration and the quality of the services, offered to the beneficiaries of the public healthcare sector in the Region V, brings a great sense of satisfaction and appreciation for the Project.

As the process of applying the social security model in the healthcare system is advancing, the pressure and the expectations from the public institutions and the rest of the institutions in general will increase, thus making them speed up the change from their traditional mode of administration and operation to a more modern one. In such a way, all the results accomplished by the REDSALUD Project are considered to be very positive as they contribute to the creation of local development. This is an indispensable condition which guarantees a process to be sustainable in the future. This is one more reason to consider the REDSALUD experience worth developing and applying it in other regions of the country.

Translated from Spanish By Boriana Maleeva 02/Dec/2007