

INFORMATION ON THE FIRST LEVEL OF CARE

Orzuza, Gloria Beatriz

Facultad de Ciencias Económicas, Universidad Nacional de Misiones
Miguel Lanús, Misiones, Argentina
gborzuza@fce.unam.edu.ar

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ABSTRACT

In Latin America and the Caribbean there are some limitations on access to health care as the scarcity of resources, physical and cultural distance between public and demanding population. In this sense, in the definition of health policies formulated by the States, the incorporation of information cannot be absent and communication technologies, as the concept of e-health applications includes electronic medical records, telemedicine services, health portals and hospital management systems.

In Argentina there was a great interest of the medical professionals in telemedicine and informatics health and in 1992 held the first World Congress. Since then, begin many initiatives in telemedicine, distance education, health portals and electronic medical records.

Researches on national health conclude that Misiones is one of the Argentine provinces that are located in a more unfavorable situation compared to other provinces. In this framework, the general strategic guidelines will contribute to an information system to be developed in the first level of care, in order to obtain information necessary for decision making and facilitate the optimization of management.

KEY WORDS: Health; Primary Care Level; Information; Strategic Guidelines.

INTRODUCTION

All organizations have an information system that allows you to reflect the activities, but that this is not sufficient for making decisions, because the health sector requires continuous updated information about patients and procedures. The World Health Organization expresses,

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that in the last twenty five years, organizations have realized that the information is a valuable resource because of the quality of information available to managers, for management decision making, depends on the success of the organization. This situation helped to understand that the information is a tool to support decision making, therefore the information and the technology used to support it have gained strategic importance in the Institutions.

All research made, jointly by the Economic Commission for Latin America and the Caribbean and the European Union, on the information technology and communication in the health sector aimed at reducing inequality in Latin America and the Caribbean, forming the theoretical framework. In this context deepens in e-health, observing the progress and challenges facing Argentina. This situation continues in Misiones, as a result of a national research on the Evaluation of the Primary Health Network and Health Services. The Provincial health system is internalized. It knows the results of interviews made to the municipal health officials, in the capital department. To then conclude with the contribution of the general strategic guidelines for an information system to be developed in the first level of care, in order to obtain information necessary for decision making and that in turn helps in optimizing management.

DEVELOPMENT

Information technology and communication in the health sector: opportunities and challenges to reduce inequalities in Latin America and the Caribbean

This document was prepared jointly by the Economic Commission for Latin America and the Caribbean (ECLAC) and the European Union (EU); and expresses that in Latin America and the Caribbean (LAC) exist significant health inequalities, with some limitations to the medical assistance access, such as the lack of resources (human, infrastructure, equipment, medicine), the distance (physical and cultural) between the public offer and the demanding population, and the reduced family income. Whoever joins the rapidly aging population and rising health care costs.

This situation involves important challenges by the States to formulate politics and strategies for health, and it could not be absent the incorporation of information and communication technologies (ICT). "The extensive changes and improvements growing ICT and the rapid development of bio-engineering and technological convergence, are transforming the

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way people work in health". [ECLAC, 2010, p. 6]⁽¹⁾. The concept of electronic health (e-health) is used to capture the potential of ICT applications, which include electronic medical records, to different types of telemedicine services, to health portals and hospital management systems.

Despite the many e-health initiatives that are implemented in the region, there is limited institutional advancement which these projects have a limited scope and are not adequately integrated with health policy nor national ICT strategies. These technologies can improve the situation of limiting access, as they facilitate the continuing education of health professionals, reduce unnecessary patient contact with the health system, enables telemedicine (communication of health professional and the patient being at different locations), the electronic medical record (EMR) and telemedicine influence the location factor, increases the possibilities of surveillance, also it generates a database updated and streamlines the exchange of knowledge between research centers. This process should be accompanied by digital literacy and reduce disparities in access to technology in Latin America and the Caribbean.

In the eighties there began important reforms of health systems in the countries of Latin America, based on the modernization of the state, in order to increase the effectiveness, financial sustainability, promote decentralization and assign greater role to the private sector. Towards the late nineties and early 2000s, the reform in the countries of the region changes its orientation. There is a strong tendency to return the state as provider and regulator system, strengthen the decentralization of the management of services and promoting the participation of the private sector.

Within this framework of health system reforms and progress in e-government policy, the information and communications technologies were slowly incorporated into the health systems of the region.

E-Health in Latin America and the Caribbean: progress and challenges

This document, prepared jointly by ECLAC and the EU, in Chapter II Background and e-health applications in Argentina, it is stated that by 2009, with an estimated population of 40,276,000 inhabitants, the infant mortality rate increased up to 13.3 per 1,000 population, life expectancy was 75 years. They had an average of 41 hospital beds per 10,000 inhabitants, with approximately 150,000 physicians and 40,000 nurses. Investment in health corresponded to 10.2% of the national budget. The infrastructure investment was 6.38% of GDP (Gross Domestic

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Product). The 25% of the population owned online phones and at least one cell phone per person, 10 out of 100 people had a personal computer, almost 3 out of 100 were Internet users at home and in the workplace over 80 % of employees possessed Internet.

E-Health in Argentina began in 1986 with the first e-mail exchange between doctors Alberto Barengols (Chief of Nuclear Medicine at Children's Hospital Ricardo Gutierrez) and Trevor Craddock (by Network LARG * net in London, Ontario, Canada), then the interest of the health centers to communicate with each other was growing. That same year the Pan American Health Organization (PAHO) was interested in the subject and supported the development of the National Academic Network between Washington and Argentina.

"Subsequently, were generated a very friendly software (PCCORREO) installed in all hospitals. In 1989, Argentina follows Canada in the ranking of health institutions network. In just three years the country had more than 2,000 institutions connected". [ECLAC, 2010, p. 30]⁽²⁾.

In 1992 the Foundation for Medical Informatics organized the First World Congress on the subject, interest in telemedicine and health informatics already existed and the professionals of Argentina were interested to participate in this process. Once installed communications networks between hospitals, in 1993 there was promotion to information access and use of e-mail. Through PAHO, in Washington, were signed agreements with the National Library of Medicine and the U.S. National Cancer Institute, allowing health professionals to access to the information. In 1996, appears the e-commerce, which offers a complete and with many possibility resources, using E-mail is a simple and inexpensive method to access medical information.

Since 2000 access to networks information continued growing, in 2005 Argentina obtained the certification in SciELO (Scientific Electronic Library Online) through its virtual health libraries, in 2006 the SciELO official site began operating as and as part of the project of RLM (Regional Library of Medicine, now it is called Latin American and Caribbean Center on Health Sciences). Another important current network in Argentina is the National Information Network on Health Sciences (NINHS).

Argentina had the support of PAHO, in the task of providing health professionals access to information, which is then joined by private initiatives such as the pharmaceutical and

information technology. By the end of the decade and with the explosion of Internet sites, medical associations began to develop their projects, computerize their libraries, and carry out their magazines and online courses. In 1999, the First Virtual Congress of Cardiology is made on the Internet, organized by Federation of Cardiology, the following year it joined the Foundation of Medical Informatics with First Ibero-american Congress on Medical Informatics Internet, called Informedica 2000.

E-Health in Argentina

Regarding Telemedicine Argentina is a vast country and doctors are concentrated in the big cities, where anybody can observe a multiplicity of telemedicine initiatives, as an example is the Garrahan Hospital (highly complex Children Hospital) and the Zaldivar Eye Institute (outpatient eye surgery center of Mendoza).

"The telemedicine program for remote diagnosis in the Garrahan Hospital is a pilot program which consists of three stages. The first was held at the hospital to test the technology and training doctors. In the second, they have connected with Castro Rendón Hospital of Neuquén. And the last, expected to cover major medical centers participating in the program of distance communication. "[ECLAC, 2010, p. 32]⁽³⁾.

The program is in the third stage, but this entity has been providing E-mail inter-consultations for 12 years. With the implementation of the communication program it will support remote health centers inside the country through highly complex queries. Its two main objectives are that patients anywhere in the country have access to good health with the possibility of referrals to centers of greater complexity, and ensure access to care assistant from the place of residence.

Another successful private initiative is the tele-ophthalmology Zaldivar Institute project, which provides "virtual video conferencing, instant access to electronic medical records and has a remote platform. Consultations take place in real time and store and forward mode. "[ECLAC, 2010, p. 33]⁽⁴⁾. The eye centers have been pioneered in the implementation of telemedicine, the first successful experience was in 1990, with the computerization of all electronic medical records of Dr. Nano Clinics in San Miguel, Buenos Aires.

Remote medical education. There is no survey available although there are multiple projects in Argentina. As an example, we can mention the experience of the Virtual Medical

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School of the University of Buenos Aires, offering online graduate courses, Health Institute, the Hospital Austral, Italian, French and German, University of Moron, Cordoba, Barceló, among others. Professional civil organizations also offer a variety of continuing medical education courses. The National Assessment and Accreditation is studying, since 2009, the approval of the online Master of Telemedicine.

Electronic medical records. The implementation of such records is slower than desirable due to the many challenges to be overcome, such as lack of legislation, standards on use, storage, processing and exchange of electronic health information; structural, technical, financial and socio-cultural barriers. In Argentina a good example of successful implementation is in the Ministry of Health of Buenos Aires, gathers 43 hospitals that are networked and under the Ministry, and has an EMR for Primary Health Care (PHC) and a reference system.

Health portals. Practically, all the Ministries of Health of Argentina have their website, with different levels of development; some of them guided information to the institutional way or used to support prevention and promotion campaigns.

E-Health goals. It may be noted, among others, the following guidelines:

"Ensure that all health system actors are interconnected. Having an emergency system that allows incorporating all the information and the data center's hospital system. Improving in technologies. Having recorded information online for any professional who needs to consult remotely. Automatically evaluate all information about treatments and drugs administered to prevent adverse and secondary reactions. Improving communications infrastructure associated with lower service costs. Train professionals in the use of ICT. Develop surveillance systems and monitoring of diseases. Deploying mobile applications that allow for better control and management of patients with chronic diseases or third age. "[ECLAC, 2010, p. 36]⁽⁵⁾.

PHC Assessment and Health Services Networks: Two views of the situation

In 2007, the Ministry of Health of the Nation, published the results of this study, made by the National University of Tucumán and Córdoba, and funded by the Research National Health Commission. In the chapter where the topic is Misiones: Assessment strategy development of Primary Health Care (PHC) in the health centers of Misiones, describes the methodology used and the result arrived.

The methodology used three research methods, exploratory; interviews with Provincial health authorities from which depended the Centers for Primary Health Care (CPHC); and a study made through surveys to the people responsible of CPHC. Taking turns the four health

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areas where sanitation divides Misiones. The results obtained from the demographic, socio-economic and epidemiological variables reveal that Misiones "belongs to the group of provinces that have a more unfavorable situation compared to other regions in the country." [Ministry of Health of the Nation 2007, p. 213]⁽⁶⁾. But notes that some indicators show a positive trend, which respond to policies and actions from the health sector.

Health policy in Misiones comprises four main stages, model of care, management, quality and financing, expressed in the Law Project of Health (in September 2007 has been pronounced as a law). The main components and variables that characterize the development of PHC are: Extending coverage of health, the goal is to extend coverage to the entire population that does not have and the most vulnerable groups. According to the 2001 Census, 57.8% of the population in Misiones has not owned health insurance; this percentage is higher than the national average, 48.1%. Network capacity of health services in the Provincial public sector, based on 2001 data, shows that it has increased by 16.7% in recent years, due to the first-level care facilities. And according to latest statistics from the Ministry of Health, up to 2005, Misiones has "306 health facilities spread across four health areas: Capital, South, Central and North." [Ministry of Health of the Nation, 2007, pg. 215]⁽⁷⁾. Existing 206 ambulatory care facilities (CPH, health posts) and 40 hospitalization facilities (hospitals and medical units).

"The number of outpatient centers (CPHC and others) seems to be sufficient, in quantitative terms, in relation to the potential population to be served, with an average of one facility every 1950 people without health insurance." [(Ministry of Health of the Nation, 2007, p. 216)⁽⁸⁾.

CPHC accessibility, utilization of services and promote access to health services is one of the main objectives of health policy PHC. To measure the accessibility and use of the Provincial public health services CPHC, was considered an adequate indicator measuring utilization rates of outpatient visits, and the resultant was a positive increase, from 2001 to 2005, 18%. Achievement of first contact, this implies that the misiones population progressively being adopted as the first point of contact PHC system, and the first level is growing in solving problems. As for the integrity of the services of CPHC, Misiones has health promoters who identify the needs and health problems of the population, from there, care services should focus on the answers, so you should have a health team composed of professionals, skilled technical

and administrative. It was observed that these centers, which depend of the Ministry of Public Health of the Province, offer care in five medical specialties.

"Pediatrics, 88.5%; gynecology, 73.1%; family or general medicine, 65.4%; medical clinic, 61.5% and less frequently in community physicians, 19.2% and psychiatric specialists. The provision of nursing takes place in all centers, in addition to dental care, 38%; mental health, 23%; laboratory; cures, 69% and electrocardiograms, 42%. "[Ministry of Health of the Nation, 2007, p. 221]⁽⁹⁾.

Clinical coordination network is essential to meet the demands. Especially when the patient requires assistance from a higher level of care to the first level, this is secondary or tertiary. From observation it shows that the coordination mechanisms of the care center users with other establishments in the health care network, are filled in some conditions that favor and hinder others. The positive aspect is that when the need of a center required more complex care, it has defined and identified a hospital or other center where the patient is transferred. And the difficulty lays in the lack of systematic mechanisms for referral for a patient.

In conclusion we can enumerate, the enabling factors for the development of primary health care strategy, the orientation of health policy towards strengthening class centers (infrastructure, education and training of human resources), the regulatory framework Provincial health law is to promote primary health care strategy as one of its main purposes; the organization of the public benefit system that distributes the centers of primary care in four health zones covering the entire province; the human resource, in terms of staffing and profile that corresponds to the number of population to be served; the activities of health workers; accessibility to centers. And the difficulties; the supply of medical care is strongly oriented to demand assistance and pathology; few preventive programs implementing, protocolizations or clinical practice guidelines designed locally; low local standardization administrative processes, using the established by the Provincial Ministry of Health; the coordination of care with other levels of care falls only in the referral of patients for admission, without joint outpatient management processes.

Health law. Management decentralization for PHC

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In September 2007 the Province House of Representatives approved the Provincial Health Act XVII No. 58. Which aims to ensure that all residents of the province access to better health and quality of life, in terms of the Provincial constitution.

Regarding the model of health management that is institutionalized after the effective date of this Act, it tends to gradual, permanent and total decentralization of medical services subsector health state for primary health care. Facilitating the development of local expertise in the management of services, promoting community participation in health care, and ensuring the coordination and complementarily institutional guidelines of the Province and municipalities. Besides, Article 22 Law No. 4397 authorizes the Provincial Executive to allocate the sum of one dollar per capita per month in order to ensure primary health care, for the purposes of which will be empowered to implement the programs, formalizing agreements with municipalities and / or other institutions, as well as made financial, accounting and budget additions and adjustments that may correspond to comply.

Based on these foundations on January 22, 2008; by Decree 71/08, it adopted the Decentralization Program Management for Primary Health Care. By the same instrument it approving the model form Municipal Project for Strengthening Primary Health and instructive, and the model agreement for Decentralization in the Management of Primary Health Care to be given by the Province with the municipality. On January 28, 2008 there was approved by Decree No. 97/08, the restructuring of the health zones and program areas under the Ministry of Health, made up of six areas: Capital, South, Central Paraná, Central Uruguay, Northern Paraná and Northeast.

Primary Care Center

The six health zones defined by the Ministry of Health of Misiones, where conform XIX Program Areas comprising the 75 municipalities of the province of Misiones, Decree 97/08, where they distributed 212 Primary Care Centers, data from Remediation Program + Network of the Ministry of Health of the Nation, January 2012.

The population in Misiones increases up to 1,101,593 habitants, according to the National Census of Population and Housing 2010. The study conducted by PAHO, the United Nations Program for Development (UNDP) and ECLAC, based on 2010 Census data, shows that 58% of the population lacks health coverage, a percentage that has not changed since the 2001 Census

(57.8%), and exceeds the national average of 48%. This highlights the importance of centers that are the gateway or the first contact a citizen has with the public health system.

Table 1. Health Zones in Misiones

Health Zone	Programmatic Area	Municipality	CPHC
Capital	I	Posadas, Garupá	37
South	II	Concepción de la Sierra, Santa María	6
	III	Apóstoles, Azara, San José, Tres Capones	8
	IV	San Javier, Itacaruaré, Mojón Grande	3
	V	L. N. Alem, Bonpland, Almafuerte, Arroyo del Medio, Caa-Yarí, Dos Arroyos, Gobernador López, Olegario V. Andrarde, Cerro Azul	9
		VI	Candelaria, Cerro Corá, Fachinal, Profundidad
Paraná Center	VII	San Ignacio, Loreto, Santa Ana, Corpus, Gobernador Roca, Santo Pipó	23
		VIII	Jardín América, Hipólito Irigoyen, Colonia Polana, General Urquiza, Puerto Leoni
	IX	Puerto Rico, Capioví, Garuhapé, Ruiz de Montoya	14
	Uruguay Center	X	Oberá, Mártires, Campo Ramón, Campo Viera, Colonia Alberdi, General Alvear, Guaraní, Los Helechos, Panambí, San Martín, Florentino Ameghino
XI			Alba Posse, Colonia Aurora, 25 de Mayo
XII		Campo Grande, Aristóbulo del Valle, Dos de Mayo	1
North	XIII	Montecarlo, Caraguatay, El Alcázar	8
	Paraná	XIV	Eldorado, Puerto Piray, Colonia Victoria, Colonia Delicia, 9 de Julio, Santiago de Liniers
XV		Puerto Iguazú	10
XVI		Esperanza, Colonia Wanda, Puerto Libertad	
Northeast	XVII	Bernardo de Irigoyen, San Antonio, Comandante Andrés Guacurarí	16
		XVIII	San Pedro
	XIX	El Soberbio, San Vicente	11

Source: Based on the Decree 97/08 of the Misiones Ministry of Public Health and CPHC data Remedy + Networking Programme (January 2012)

The municipality of the city of Posadas Capital Department signed the Convention for the Decentralization of Management for Primary Health Care, with the Ministry of Public Health of the Province, in October 2008. For the purpose of obtaining information on the municipal CPHC, a first contact was materialized with the authorities in the area, the Capital Municipality. The Primary Care Center hierarchically dependent of Primary Care Management which integrates the Directorate General of Health, in the Department of Quality of Life. To perform the Decentralization Program in Management of PHC was appointed, in the area of quality of life, a person responsible for managing the program, a fund manager and a municipal technical team to support the management and implementation. Centers where is the program running are

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located in the following neighborhoods: Miguel Lanús, Los Paraísos, Las Rosas, 2 de Abril, Latin-American, Belén, San Marcos y San Gerardo.

Interviews were made to the CPHC health officials, the findings shows that, in terms of organizational structure, it is made up by the Head of the Centre (doctor / nurse), by a team of medical professionals, for administration, cleaning and security services. As for human resources, on average each Center has nine people (including medical staff). The professional team consists of general/clinical doctors, gynecologist/obstetrician, pediatrician and nurses in 100% of the CPHC, dentists in 90% and social worker in 70%. It has administrative staff in 100% of the centers, to which is added the support staff (cleaning and security). They receive training on specific topics to the activities or programs provided by them. Regarding the management, attention to the public at the Centers extends from 6 to 6 PM, during this time doctors in each specialty care for their patients, nurses act as collaborators. Immunization activities are carried out, run activities under the Just Born Plan, in the pharmacy department medicines are sold under the Remedy Program, different types of controls are performed in people as blood pressure and diabetes in adults, and underweight children or under the Zero Hunger Program, among the most representative activities. All CPHC own personal computer and telephone line. In the administrative tasks are those concerning to the Just Born Plan, which is one of the main tasks undertaken by the administrative; nursing staff helps with administrative tasks and draws up the lists of epidemiology of acute respiratory infections (ARI) and delivery of milk; the social worker prepares reports for the Remediation Program. Reports produced by each Service Center refer to the Primary Care Directorate of the Municipality, to form municipal statistics and subsequent referral to area statistics from the Ministry of Public Health, or to be presented to the heads of the Programs of the Ministry of Public Health of the Province for the purpose to fulfill the requirements for each plan or program running. The building infrastructure is adequate, 80% have a good building structure, building relatively new or nearly new, with offices, waiting room, nursing, pharmacy, administration, health and gardens. Regarding the technology, each center has what it takes to run, as well as providing dental services center. The coverage area includes attention to the neighborhood where the is CPHC located and the surrounding neighborhoods, but as health officials commented some people that are served are from distant neighborhoods outside the coverage area.

Information System

The formulation of the strategic lines are, for the Organization, "the foundation and guide future actions for the short, medium and long term, highlighting main goal the development of a comprehensive plan of action," [Mora Martinez , 2003, p. 61]⁽¹⁰⁾ which will respond to problems as they go presenting themselves, and second, will be the foundation for managing activities and administrative assistance in an integrated manner, but each area without losing their autonomy.

The action plan for each strategic line will be based on the strategic objectives of each line (involving the actions to be undertaken to achieve the goal) and action plans for each strategic objective (operational approach, should be achievable, measurable, and required the definition of the responsibility and generation of information which allow the control and evaluation). The responsible is the person assigned in the organization who should assume the responsibility to ensure the results of objectives; and the schedule allows setting the deadlines for their implementation.

It will form a task force, composed of a local health authority area (General Department of Health) to act as supervisor, computer specialists (professionals and technicians), medical professionals whose activities were developed in centers. Responsible for implementing the project at each center will be the professional responsible for each of CPHC.

Strategic lines

I. Develop pan information system on the first level of health

Strategic objective: Improve the organization of primary care centers.

Actions:

1. Planning. Needs for knowledgment will be defined, specifying the information products that will results with the utilization of information and communications technology (ICT). Health systems that are available will be observed, there will be a survey of all the information generated in each center, if you have electronic formats, with what level of detail is handled. Will be identified infrastructure, technology and human resources. Identify the expert technical staff from existing human resources. The process will be analyzed, each area that will be part of the system will be known, as administrative, medical and nurse center, pharmacy, services. It will be

defined the methodology that will be used in the management of the project. Manager, Supervisor. Evaluation, monthly review. Schedule, start and ending: on February.

2. Preparation. Will design the process that is part of the information system, observing that each CPHC should be connected to a net of the central system, based in the Primary Care Direction, where the information that will allow the elaboration of reports, indicators and statistics. It will permit the communication with the second and third level of sanitary care, enabling the communication and a Reference system with patients. It will draw the standardization of administrative processes aimed at PHC. They define the required functional characteristics and training needs. Manager, Supervisor, Computer Professionals and Professional Center. Evaluation monthly review. Schedule, start: March and completion: April.

3. Acquisition. It will define the technological specifications, capacity, training, responsibility and maintenance needs. Take into account the existing computer equipment. It defines standards for data processing required for technical and electronic equipment interconnection. Manager, Supervisor and Computer Professionals. Evaluation, monthly review. Schedule, start: May and completion: July.

4. Infrastructure and development. It will progressively, respond to the estimate schedule. It must ensure the safety and reliability of the information, determining the level of access between the system operators. There will be operators designated at different levels. They design the minimum and necessary adjustments in facilities and physical spaces. Responsible professionals. Evaluation, monthly review. Schedule, start and end: August.

II. Improve the quality of information

Strategic objective: Optimization of management.

Actions:

1. Human Resources training. Internalizations in ICT, in information system, in programs, upload data and results information. Manager, Computer Professionals and Professional Centers. Evaluation, monthly reviews. Schedule, start: September and end: October.

2. Professional implications. Encourage and facilitate the participation of human resources in continuing education courses. Responsible Professional Center. Evaluation Quarterly Review. Schedule, start: November and completion: ongoing.

Strategic objective: Data Management.

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Actions:

1. Medical Data Management. Medical records, nursing care, dispensing of medicines, plans or programs running. Getting a consistent set of reports, statistics and health indicators related to each of the areas of the Health Center. Responsible, Professional Center. Monthly review. Schedule, start: November and end: ongoing.

2. Electronic Health Record. Record of the proceedings of each patient at the center, personal data, diseases, treatments, prescriptions, requests. Responsible, Professional Center. Evaluation, monthly review. Schedule, start: January second year of implementation and completion: ongoing.

3. Health Card. Patient's unique ID for the Center, which reports their personal and Care Center that owns their home data or who has made the first contact with the CPHC, this information will allow one to locate the patient's electronic medical record in the systems. The card will be given to patients who have attended for a period of six months at a Center for treatment. Responsible, Professional Center. Evaluation bimonthly review. Schedule, start: July of the second year of implementation and completion: ongoing.

CONCLUSION

The health law in Misiones defines primary care as the axis of change in health policy, establishing it as the guarantor of the overall health of the population. Develop an information system in the primary care level should begin incorporating the concept of added value that this decision implies.

The primary goal of computer information systems is to improve the way we work, increasing efficiency and data quality. Information that is necessary when defining public policies and strategies. Hence the importance of the contribution of strategic guidelines for the development of an information system in primary care centers, which aims to improve the quality of information to adjust public policies defined, allowing the public to have access to a better standard of health care and thus improve their quality of life.

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