



El Salvador

Territorial community teams

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Background

El Salvador is a Central American country of about 21 000 km²; in 2015, it had a population of 6.4 million inhabitants (giving a population density of about 300 inhabitants/km²). Administratively, the country is divided into 14 departments and 262 municipalities. Urban dwellers make up 62.4% of the population, life expectancy was 73 years in 2015, and the Human Development Index is 0.666.

In 2009, the total number of first-level health care facilities was 377 health units, and most of the communities in the poorest municipalities received basic care packages through outsourced services supplied by nongovernmental organizations (NGOs). In response to this situation, the government undertook a national investigation and analysis of access gaps, the results of which led to the reorientation of the health system towards primary health care (PHC), through a model based on family and community health. The new model included a strong presence of first-level-of-care health services, organized in health networks(1).



Intervention

The new health care model and the expansion of the first level of care

In undertaking the health reform, the national authorities established eight strategic axes, one of which was the Integrated Health Services Delivery Networks (2). To strengthen, expand and bring the first level of care closer to the population, the health authorities prioritized the 100 poorest municipalities (3). Family Community Health Teams (referred to as “ECoS F”, from the initials of the name in Spanish) were created and strategically distributed and became the cornerstone of the service network. Each ECoS F team comprised a medical doctor (a general practitioner), a professional nurse, a nursing technician and three health promoters. These teams were responsible for an average of 600 families in rural areas, and for 1800 families in urban areas.

The new model was implemented in stages, with priority being given to the poorest and most marginal municipalities, and careful human resources planning for the gradual deployment of the ECoS F.

In addition, for health promotion and disease prevention, Specialized Community Health Teams (ECoS E) were created as part of the second level of care. These teams comprise a pediatrician, an obstetrician-gynecologist, an internal medicine specialist, a physiotherapist, a health educator, a nutritionist, a psychologist, a nurse, a nursing assistant, clinical laboratory professionals and dentists. Each ECoS E serves an average of 30 000 inhabitants in rural areas and 42 000 inhabitants in urban settings, and their services complement those of the reference hospital.

At the first level of care, ECoS F characterize the assigned population and geographical area of responsibility (e.g. villages, cantons and municipalities, as appropriate). They visit families and complete the relevant forms for each family. Based on the analysis of the information obtained from the family forms and the assessment of the participating community, the ECoS F team carries out the characterization and “dispensarization” of people, based on their level of health risk and their social determinants (4). The Spanish term “dispensarization” has no obvious equivalent in English. It refers to a proactive programme that provides active, continuous and controlled PHC in line with the health needs of the individual and the family; monitoring of the programme and its effects; and assessment of results. These elements are used to plan interventions (including health promotion) by life course, taking into account the PHC pillars of intersectoral action, social participation and



equity. The interventions at the first level of care comprise about 300 health actions, grouped into health promotion and education, preventive care, care for prevalent diseases and community-based rehabilitation.

As part of the strengthening of this first level of care, the 377 health units in 2009 were increased to 752 Community Health Units (UCSF) in 2017, with the UCSF categorized into 420 basic, 293 intermediate and 39 specialized units. There are 537 ECoS F teams and 39 ECoS E teams, caring for more than 1.5 million people (408 662 families) in 186 municipalities (70.9% of the country's territory). The municipalities covered include the 100 that are part of the Rural Solidary Communities Program (a social programme that assists families in extreme poverty), the 14 that are part of the Urban Solidary Communities Program (a national programme that aims to provide an integral approach to addressing and improving the conditions of human poverty, habitability and social exclusion in precarious urban settlements) and 50 that are part of the Territories of Progress Program (which currently constitutes 29 territories covering 207 of the 262 existing municipalities in the country – a population of at least 3.2 million people) (5).

Table 1. Coverage and change over time: ECoS, UCSF and human resources

First level of care	2009	2014	2016
Municipalities with ECoS	0	164	186
People covered by ECoS	0	1 897 078	1 921 891
Families cared by ECoS	0	378 068	378 325
ECoS F	0	482	537
ECoS E	0	38	39
UCSF	377	708	713
Specialized UCSF	0	38	39
Human resources for health	7 724	10 718	12 669

ECoS E: Specialised Community Health Team; ECoS F: Family Community Health Team; UCSF: Community Health Unit.
Source: Ministry of Health.

Key elements of reform

Human resources for the first level of care

Another essential element was the allocation and distribution of health human resources in the first level of care. To continue making significant progress in the allocation and distribution of human resources, the hiring of health professionals increased. Despite not meeting the established goal of 25 human resources per 10 000 inhabitants, by 2015, in comparison with the 2010 baseline, several departments had tripled their health human resources in terms of absolute numbers; these departments included La Unión, Morazán, Cabañas and Chalatenango. All of these departments still have the challenge of continuing to improve the equitable distribution of health personnel in the areas of medicine, nursing, and maternal and child health (6).

The government has promoted an intense process of training in PHC and family health (including for PHC managers). All training has been implemented in a decentralized way and has led to the development of new competencies in all of the ECoS F team members. A combination of conceptual content, and methodological and operational tools has allowed the teams to develop a new vision of individual and collective health, facilitating the implementation of the health care model.

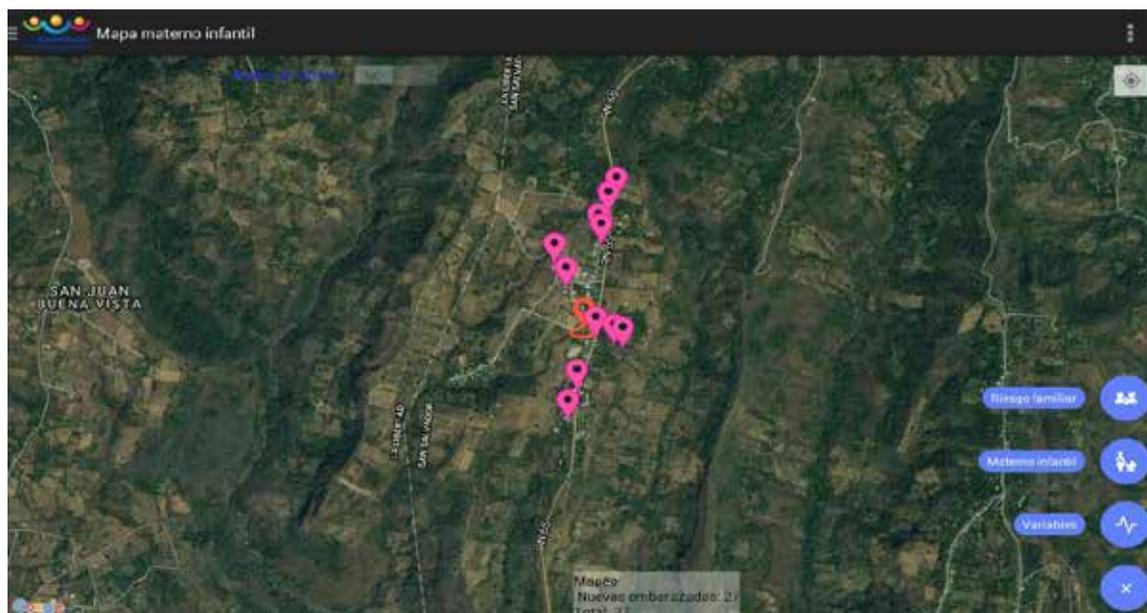
Incorporation of ICTs in the first level of care

The strengthening of the first level of care required the incorporation of information and communication technologies (ICTs) in health, as part of the work process of the ECoS F teams. Each team was equipped with a tablet per area of affiliation; also, a mobile application (app) that allows the entry and update of family forms was created. This technology makes it possible to develop georeferenced maps with all the necessary information to facilitate the work of ECoS F personnel in local communities. For example, it allows users to generate specific maps of populations of interest by age, sex and health status (e.g. pregnant women, and people with diabetes, hypertension or chronic kidney disease). An example is shown in Fig. 2.

These maps facilitate the analysis and characterization of the population for which the ECoS F is responsible, the dispensarization and follow-up of patients, the development of intervention plans, the estimation of service demands, and the timely coordination of actions with other providers within the service network.



Fig. 2. Example of a community risk characterization map (using the family file and the georeferencing system)



Source: Information Technology and Communications Division, Ministry of Health.

The updated information on the tablets is periodically uploaded for backup and consolidation at the regional and national levels, through a network of points that provide wireless access to the institutional intranet.¹

This ready availability of information has enabled timely, almost real-time, decision-making that takes into consideration the characteristics of the social determinants of the health of the population, as well as the specific needs of the allocation and distribution of the human resources of health, supplies and medicines in the first level of care.

The development of this app was carried out by the staff of the Health Ministry's ICT Directorate, using fully open access software, and the app has been made available under the same terms (7).

¹ As of June 2018, information on the Family Record has been updated in 90.77% of the families by means of the tablets distributed. It will be completed 100% before the end of the year

Enabling factors and barriers that were overcome

Several related initiatives have enabled the advances described here. These initiatives include policy strategies such as the strengthening of the health infrastructure (with an investment of US\$ 401 million in 401 health facilities) and investments on several fronts, including equipment for the entire Health Ministry's service network, supply of medicines, a unique health information system and health surveillance.

The National Health Forum (8) is a right-to-health social movement that was created with the goal of supporting the health reform process through community participation. The forum helps to ensure social accountability, and it participates in the managing committees of the health services networks.

At the beginning of the reform period (2009–2014), the government invested heavily to strengthen the first level of care. After 2014, the budget was limited due to a fiscal crisis (which decreased the flow of resources) and to political polarization (which made it impossible to allocate the necessary budget increase to expand the initiative).

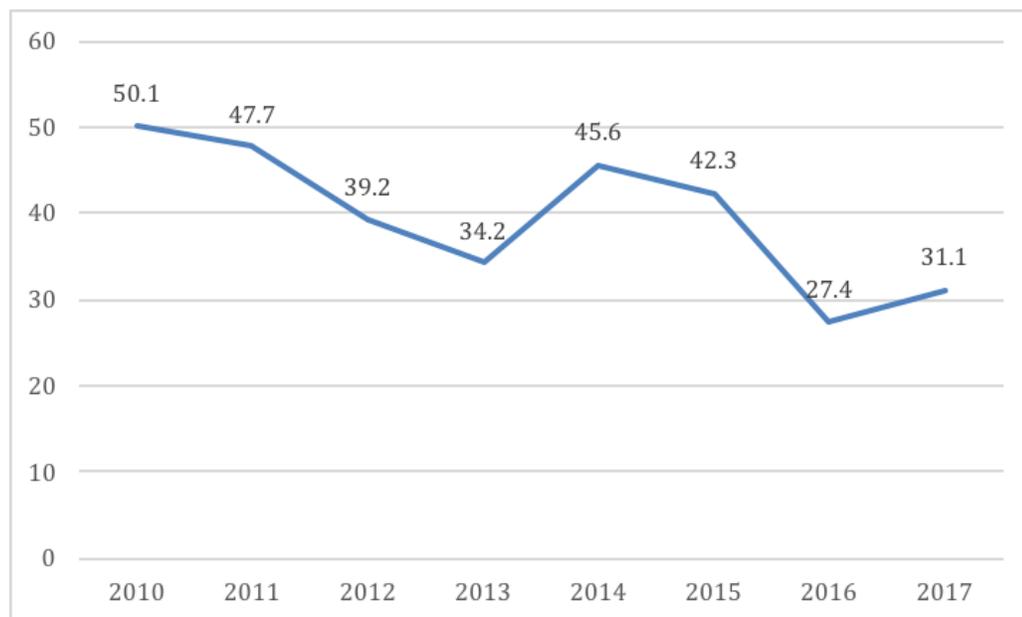
Another barrier to implementation was violence in the urban areas, which caused high staff rotation at the first level of care. Threats and violent acts targeting health staff and the population (including blockages of health facilities, physical attacks, sexual abuse and even murders) disrupted the provision of services. Phenomena such as urban invisible borders were common, and these affected accesses to health services. For example, people living in areas controlled by a gang could often not access health services that were located in an area controlled by a rival gang.

Impact

Significant advances in health are evident, 8 years after the initial implementation of the health reforms. The maternal mortality ratio was reduced from 51 deaths per 10 000 live births in 2009 to 42.3 in 2015 and 27.4 (9), as shown in Fig. 3. Authorities attributed this reduction to the application of strategic interventions such as the elimination of direct out-of-pocket payments for care and of geographical barriers, the establishment and increased availability of ECoS F in impoverished areas (particularly in rural ones), the expansion of the health services network and greater access to qualified health personnel.



Fig. 3. Reduction in maternal mortality ratio (per 100 000 live births), El Salvador, 2010–2015



Source: Statistics Bulletin, Ministry of Health.

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