



'HEALTH FOR ALL'

Sao Tome and Principe INFORMATIVE DOCUMENT



1988-2016

Since 1988, **Instituto Marques de Valle Flor (IMVF)** develops a broad program of reinforcement of the health sector in Sao Tome and Principe. With the support of the **European Union, the Portuguese Cooperation, Calouste Gulbenkian Foundation, the Portuguese Directorate General for Health** and in narrow partnership with the **Government of Sao Tome and Principe**, the program Health for All has put in place, during the last 29 years, a progressive and constantly growing strategy of capacity building and development of the health sector in that country. The efforts made have already allowed the transition from an ineffective health service to a **decentralized health service** that presently **reaches all the territory and the national population**, having in its core the introduction of an **integrated set of services that ensures primary, preventive and specialized health-care**. The fruits of the above mentioned partnership are clear, and **Sao Tome and Principe is today one of the countries in sub-Saharan Africa with the best health indicators**, when compared with other countries of the same region.



Sao Tomean as engine of their own development...

Capacity building, participation and the feeling of appropriation by local communities are crucial elements in any process of economic or social change. The decision of **strengthening national human resources** is therefore central in what concerns the fight against brain drain and immigration. In that sense, all the intervention is marked by **the joint definition of priorities and strategies of development** assuming, in this context, great importance the relation of great proximity and trust with the Ministry of Health and Social Affairs in Sao Tome and Principe. **The responsibility of changing and progress shall belong to local actors**, direct partners in the development of the country that, through mechanisms of Good Governance, ensure the monitoring and follow up of change.

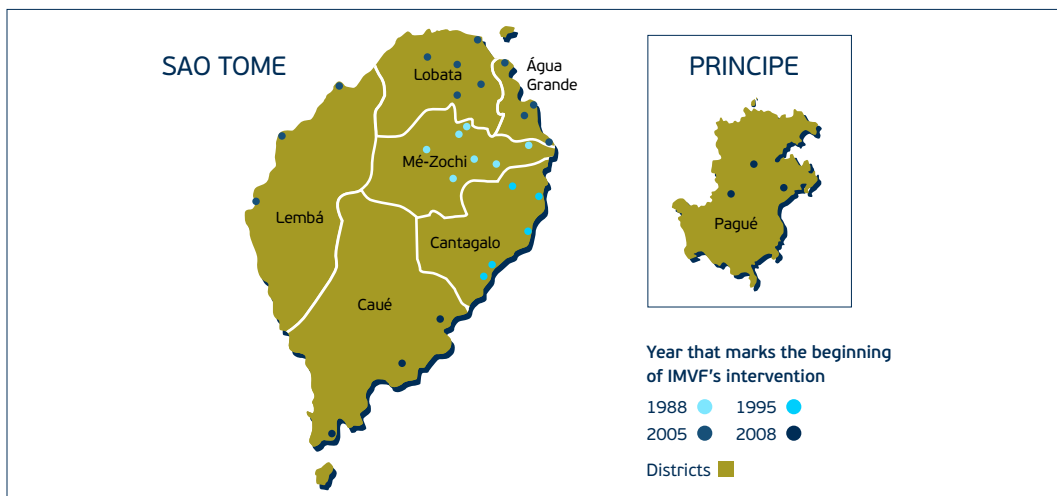
An innovative methodology, a paradigm for other interventions...

The methodology adopted is based in a meticulous analysis of **the real needs and potentials of local partners and of the country**. The strategy of intervention is, since its beginning, in constant harmony with the public policies and strategies in the domain of health, as well as in harmony with the best international practices, drawn by WHO – World Health Organization, to healthcare in Developing Countries.

Adding to these measures, it should be highlighted the introduction of **an integrated set of services** that allowed accessibility, equity and effectiveness in healthcare services in all the country. Only through an integrated approach of care (preventive, primary and specialized) is possible to improve, in a sustainable way, national health indicators.

The mentioned set that includes, currently, **a network of 30 health and 2 hospitals units in all the country**, has promoted in a sustained way: **preventive healthcare services** (education for health campaigns, access to drinking water and sanitation systems, vaccination campaigns and maternal and child care); **primary healthcare** (medical and nursing care, clinical investigations and treatments based upon essential drugs); **specialized care** (in the areas of pediatrics, internal medicine, general surgery, obstetrics/gynecology) by Sao Tomean specialists.

The introduction of the mentioned set was followed by **the reinforcement of human and technical local resources**, ensuring not only the institutional strength of the Ministry of Health but also the availability of human and technical resources capable of addressing the national epidemiological profile, promoting **the establishment and enhancement of national human resources**.



As a result, it is possible to witness a greater empowerment of healthcare centers by integrating within it **a wider range of services**, namely hospitalization, diagnostic tests, community pharmacies and better working conditions. Those improvements have allowed **a reinforcement of the role of the healthcare centers as a first line of action and interaction with the community**.



From one district to the whole national territory... ...from primary healthcare to specialized care

With the set of integrated healthcare duly consolidated and with the broad access to all healthcare centers guaranteed, the requirement to answer to care needs in nonexistent specialties in the country was pressing. The next step was to invest in **strengthening the implementation of secondary and tertiary healthcare in the central hospital** of Sao Tome and Principe - Hospital Dr. Ayres de Menezes. Therefore, a new challenge was embraced: the Health for All - Specialties project which aimed to **complement the chain of primary healthcare implemented with specialised assistance of secondary and tertiary care.**



With the aim of introducing faster and more adequate solutions to an integral healthcare, of reducing the number of medical evacuation cases and of promoting the improvement of local expertise, this intervention included the creation and structuring of services, as well **as the conduction of short term regular missions of Portuguese specialists to the country.**

The existence of specialized consultations, exams and surgeries that previously would require treatment abroad is now a reality in the country. And the turnover of medical staff, nurses and Portuguese technicians in the 24 different specialties has contributed decisively for this. After more than five years, **the reduction in the number of patients with advanced critical condition** is already visible as well as the **more regular and effective medical care of the population.**

The missions of the Portuguese specialists to the country have also allowed the **training of Sao Tomean physicians and other health staff in what concerns evaluation, follow-up and stabilization of risk situations.** In parallel, the intervention has ensured the strengthening of healthcare facilities through the acquisition and distribution of medical, surgical and hospital supplies, increasing exponentially the ability to provide healthcare in the country.

Before each medical mission, the identification of the most complex clinical cases within different medical valences is carried out in Sao Tome, and a list of patients that must be seen and individual clinical status is made available to specialists before their departure from Portugal.

The implementation of these missions has the support of the Portuguese Directorate General for Health (DGS in the Portuguese acronym) and the participation of 27 Portuguese hospitals, with committed and dedicated professionals who volunteer to support the improvement of healthcare in Sao Tome. **The intervention has economic, clinical and social gains vital to support the sustainable development of the country** as it provides Sao Tome with the skills and effective techniques to the prevention, treatment and monitoring of complex clinical cases that until now could only be solved across borders.

The results achieved by the project show effectively the potential for a more efficient financial management. **Using less than 20% of the estimated costs of Diagnosis Related Groups (DRG)** (costs for equivalent treatment in Portugal in a medical evacuation situation), the project **contributed to the reduction in over 50% of the number of medical evacuations** showing a substantial improvement in national healthcare (that therefore achieves health equity for consultations and incomparably better specialized interventions); and a double saving for the Portuguese State and the Sao Tomean Government (which applied on average 40% of their national budget in health medical evacuations).

This saving has become clear in a recent study developed for the specialty of ophthalmology, regarding the interventions carried out between 2010 and 2016. Medical missions of the Ophthalmology specialty, that took place between 2010 and 2016 under the Health for All Program, represented the equivalent of 19,9% of the estimated costs that would have occurred if the treatment had taken place in Portugal, contributing to a saving of 80,1% (equivalent to DRG value in Portugal). This value was calculated without considering the costs of potential medical evacuation of patients (see table below). The fact that the Program uses only 1/5 of the total amount provided for interventions in Portugal reinforces the important role that the Portuguese specialists' missions have developed on the ground, showing a clear efficient use of resources in the number of interventions made. Besides the financial added value, this intervention also prevents the division of families and the brain drain of technical staff abroad.

Ophthalmological surgeries and consultations carried out between 2010-2014 under Health for All

	Costs with ophthalmological missions	Equivalency to DRG value in Portugal
Costs with 75 Man/Ophthalmological mission x 15 days/mission (equipment, materials, consumables, travel and accommodation)	505.200,00€	
Consultations and Exams (in a total of 7.514 patients)		447.659,00€
Surgical interventions (in a total of 1.147 patients). It includes loco-regional and general anesthesia.		2.092.234,36€
TOTAL	505.200,00€	2.539.893,36€

For the significant progress in the provision of healthcare in the country, it should also be noted the contribution of **a more dynamic and flexible structure, recently created, to facilitate contact between Portuguese and Sao Tomean physicians - Telemedicine.** With sound and image precision, this was the obvious solution to strengthen the intervention of the project and introduce innovative elements, such as a range of new solutions for complementary diagnostic tests.

Telemedicine, a capacity building and development tool...

Cooperation between national and international bodies gave impulse to the practice of Telemedicine in Sao Tome and Principe what not only enhances the monitoring and guidance of more complex clinical cases but also promotes training and advice of Sao Tomean health professionals at distance. In March 2011, IMVF held its first teleconsultation, transforming today, telemedicine, **in an open channel connecting the Central Hospital of Sao Tome and Principe and the Portuguese specialists.**



A more regular monitoring of clinical cases aims, above all, timely diagnosis enabling better therapeutic orientation or even the schedule for a forthcoming visit of specialists to the country. This feature favours a better resolution of the patients' clinical condition allowing, in many cases, the avoidance of medical evacuation. On the other hand, in the case medical evacuation happens, the system provides prior identification, at distance, of the clinical condition of the patient, allowing to prepare and identify hospital(s) and physicians(s) available to receive the patient in Portugal improving, therefore, the effectiveness of the evacuation and, not less important, giving a face to the patient and to the medical team.

The complementarity between the Medigraf Platform (telemedicine system developed by PT Innovation and the PACS system) introduced by the Health for All project is the wide novelty in this approach that is committed to improve the clinical files of the patient and the range of **new solutions for complementary diagnosis and therapeutic indications in real and deferred time.** Turning this digital platform into a leading service in the sector. Furthermore, the specialists can access the patient's clinical files in Portugal or anywhere in the world and can therefore provide assistance and send his medical reports through any laptop.

The possibility of exploring the distance support in several medical specialties works as a technological complement to the project *Health for All: Specialties* estimated to perform about 5,000 teleconsultation per year and to give support for proper planning of surgeries in Sao Tome and Principe. Telemedicine also allows strengthening the scheduled training sessions, working as a complement to field missions.

Since the beginning of Telemedicine activities, between March 2013 and June 2016, over **60 thousand exams and clinical records** of the various medical specialties have been introduced in the system, with the possibility of being consulted from a laptop anywhere in the world. These exams were the basis for the realization of a substantial number of teleconsultation and distance learning that already exceeded the originally planned.

More Innovation, More Vanguardism

Encouraged by the results obtained after two years of Telemedicine between Portugal and Sao Tome and Principe, Instituto Marquês de Valle Flôr (IMVF) sought to go further, absorbing the experience gained and uplifting its intervention in healthcare.

In **partnership with PT Innovation**, IMVF initiated the design of a set of specifications which aimed to turn telemedicine affordable in what regards economic and communication requirements. This process culminated in a new telemedicine platform that puts **Portugal in the forefront of technology information** and communication at the service of Health. Medigraf® NG is compatible with any equipment or means of medical diagnosis and is low cost. The main features of this equipment are:

- Requires only 2MB internet bandwidth;
- It can be used in a PC or laptop without special requirements;
- It allows the incorporation of a clinical process including examinations files;
- It has a scheduling tool;
- It allows consultations in live stream, remote or emergency;
- It has internal communication tools through internal mail and chatroom;
- It allows simultaneously sharing of consultations (or trainings) in various parts of the world;
- It currently integrates multiple devices, allowing real time broadcasting of the following: vital signs screens, echocardiography, echography, mammography, endoscopy, conventional radiography, among others.



A major breakthrough was the integration of several ophthalmology equipment that allow a thorough observation at the distance of thousands of miles under the supervision of an ophthalmologist and with the possibility of saving files of all images and examinations. This advance allows access to early diagnosis to people excluded by lack of specialists, by distance or simply by poverty.

Thus was born the Teleye® result of a team effort between IMVF and PT innovation.

This equipment includes a slit lamp, one auto-refractometer/keratometer, a retinographer, a tonometer and a high-definition camera. Functionally the integration of this equipment with Medigraf® allows an observation of equal quality as the face to face one, **guiding the ophthalmologist at distance** to the acquisition of diagnostic tests. This tool revolutionizes the way of looking at health cooperation in the field of Ophthalmology, since it enhances a potential access of poor people to such healthcare.



Some aspects of Teleye®

Attesting the relevance of the project, successful tests have been carried out in partnership with the **Brazilian-Portuguese** multi-stakeholder partnership, thus opening an opportunity window to adapt and implement the “iSEE” model in Northern Brazil (Rondônia and Amazonas States). Furthermore, it is worth to highlight that, in Cape Verde, a collaboration protocol has already been signed between the **Portuguese and Cape-Verdean Ministries of Health**, confirming the implementation in 2017 of the “iSEE” approach in 4 hospitals of this archipelago, namely at Praia, Boavista, Santo Antão and Fogo.

Adaptation to a new epidemiological profile

Affected for years by endemic diseases (tropical diseases, diarrheal diseases, acute respiratory infections, malaria, tuberculosis or HIV/AIDS), Sao Tome and Principe now witnesses an evolution of the epidemiological profile, leading to new causes of mortality in the country. Enshrined in the group of **noncommunicable diseases** these new problems (among which stand out cardiovascular diseases, chronic obstructive respiratory diseases), diabetes, multiple trauma, oncologic diseases, **are already responsible for 2/3 of mortality in the country.**

Against this evolution of the national profile, and following the continuity of the work developed, IMVF started the **Health for All project: Fight against Noncommunicable Diseases**, addressing the new health challenges and focusing on strengthening and capacity building of the public sector to a proactive and more effective **response in the prevention and treatment of noncommunicable diseases.**

Constant monitoring and evaluation of impacts...

The Health for All program introduced **control procedures and strict, efficient, coordinated and decentralized management**, investing to this end in the motivation and capacity building of local technicians with the aim of achieving institutional strengthening of the partner and the sustainability of the measures introduced in the current National Health



System. The program also provides procedures for financial sustainability through a cost recovery policy that takes into account the vulnerability of the population. In terms of financial efficiency, **program management can far exceed the indicators set by the World Bank and WHO for sub-Saharan Africa**, being an important contribution to achieving the targets set by the Millennium Development Goals for the country in the health sector, standing out as a model in providing appropriate care for Developing Countries.

The Health for All Program is an **innovative practice of health development in an African Portuguese speaking country** from which important lessons can be learned in the area of management and differentiated offer of services at the level of basic health units. This Program may be a paradigm to change health systems, particularly in countries where social exclusion, poverty and geographic isolation lack of necessary conditions hinder access to health care.

Healthcare network between Portugal and Sao Tome e Principe

Over the past few years, the Health for All program in Sao Tome and Principe gathered under the same purpose **many Portuguese medical institutions**. Gradually and in a spirit of cooperation and international solidarity, Portuguese professionals of various medical specialities nationwide, joined this intervention. Today, they form a wide network of high quality medical specialists cooperating with Sao Tome and Principe.

Portuguese medical institutions involved, and respective specialities:

- *Prof. Doutor Fernando Fonseca Hospital, in the sectors of General Surgery, Psychiatry, Pediatrics, Pathology, Ophthalmology, Radiology Imaging, and Neurology;*
- *D. Estefânia Hospital, in the specialties of Anesthesiology, Pediatric Surgery, Pediatric Orthopedics and Nursing;*
- *Egas Moniz Hospital, in Ophthalmology and Urology;*
- *CUF Descobertas Hospital, in Dermatology and Orthopedics;*
- *CUF Infante Santo Hospital, in Otorhinolaryngology and Audiology;*
- *Santa Maria Hospital, in Obstetrics and Gynecology and Gastroenterology;*
- *Pulido Valente Hospital, in Pulmonology;*
- *IHMT - Institute of Hygiene and Tropical Medicine;*
- *Portuguese Institute of Oncology of Lisbon, in Obstetrics and Gynecology;*
- *São José Hospital, in Physiotherapy and Plastic and Reconstructive Surgery;*
- *Health School, Polytechnic Institute of Setúbal, in Physiotherapy;*
- *Navy Hospital, in Ophthalmology;*
- *Queluz Health Center, in Nursing;*
- *Santo António Clinic, in Nursing;*
- *Curry Cabral Hospital, in Nursing;*
- *Sete Rios Health Center, in Nursing;*
- *Roriz Lab, in Anatomic Pathology;*
- *Pedro Nunes Institute [Coimbra], in Molecular Biology.*
- *Beatriz Ângelo Hospital [Loures], in Obstetrics and Gynecology.*
- *Santo António Hospital [Porto], in Anesthesiology, General Surgery and Nursing;*
- *Coimbra University Hospital Centre, in Cardiothoracic Surgery;*
- *Covões Hospital, in Pediatric Cardiology;*
- *São João do Porto Hospital, in Nephrology and Pediatrics;*
- *School of Medicine Lisbon University, in Infectious Diseases;*
- *Portuguese Association of Diabetes;*
- *Portuguese College of Dentists.*

Health for All in numbers

Ophthalmological Care (2010 - June 2016)

Prevalence of Avoidable Blindness and Visual Impairment In Sao Tome dropped by

44%

An Average Cataract Surgical Rate of

1048

Million Inhabitants / Year

and a Cataract Surgical Coverage of

64%

were attained



Health for All in numbers

Primary Healthcare (2008 - June 2016)

324
thousand
family planning
consultations



272
thousand
prenatal
consultations



46
thousand
postpartum
consultations



888
thousand
child control and
nutritional surveillance
consultations

301
thousand
child deworming
treatments

525
thousand
given vaccines



635
thousand
nursing treatments

621
thousand
medical consultations

648
thousand
clinical analysis



Health for All in numbers

Specialized Healthcare (2008 - June 2016)

More than
150
physicians,
nurses, health
professionals
and researchers

24
medical
specialties

429
missions
(man-mission)



More than
29
thousand
consultations

More than
4500
surgeries

More than
60
thousand
exams and clinical
archives in telemedicine



More than
300
training sessions

More than
16
thousand
additional
diagnosis exams

More than
1900
consults through
telemedicine



24
long-term
training programs
in Portugal

27
partner health
care institutions
in Portugal



Health for All: awards and merits

Awards

2009 | “Health for All - Changing the Paradigm of Healthcare Provision in Sao Tome and Principe - Case Study: 1988-2008”: **honorable reward** under the 2008 Edition of Bial Awards.

2013 | Medigraf 3.0 receives **awards in the Category Changing Lives of AfricaCom and Broadband Infovision Awards 2013**, standing out as an app in the health sector with the ability to improve the living conditions of people.

2015 | **European Society Award** assigned every year by the **European Parliament** with the purpose of compensate exceptional activities developes by groups, citizens associations or organizations in the domain of promotion of a wilder European citizens integration, cooperation, European spirit reinforcement and in the scope of the values consecrated under the Charter of the Fundamental Rights of European Union.

Distinctions

2009 | Health for all recognized as of **Public Utility by the Portuguese High Commissioner for Health** (Ministerial Order nº 6243 of 5th March 2008 and by the portuguese ministry of health (january 2013).

2011 | The Health for All project is selected by the **United Nations** as one of the 15 most inspiring stories in the world and is presented as an example of good practice in capacity building and sustainable development in the High Level Forum on Aid Effectiveness held in Busan, South Korea.

2011 | Visit of the **President of the Democratic Republic of Sao Tome and Principe**, Manuel Pinto da Costa, to the Headquarters of IMVF in recognition for the work developed in Sao Tome over the last 25 years, particularly in the health sector.

2012 | Cooperation Protocol between the Portuguese Directorate General for Health and the Ministry of Health and Social Affairs of Sao Tome and Principe that allows wider and regular use of telemedicine in Sao Tome and Principe.

2013 | **Silver Medal** for outstanding services awarded by the Portuguese Ministry of Health distinguishing the work developed by IMVF in the healthcare sector for the population of Sao Tome.

2013 | **Allocation of Public Utility Status** by the Sao Tome and Principe government for IMVF's 25 years of work in the country in the sectors of health, education and food security. Delivery of individual recognition diplomas to the responsables, specialized physicians, nurses, technicians and other staff who integrate the Health for All project

2015 | Ceremony of **recognition of IMVF's work** held at Sao Tome and Principe International House, in Lisbon.

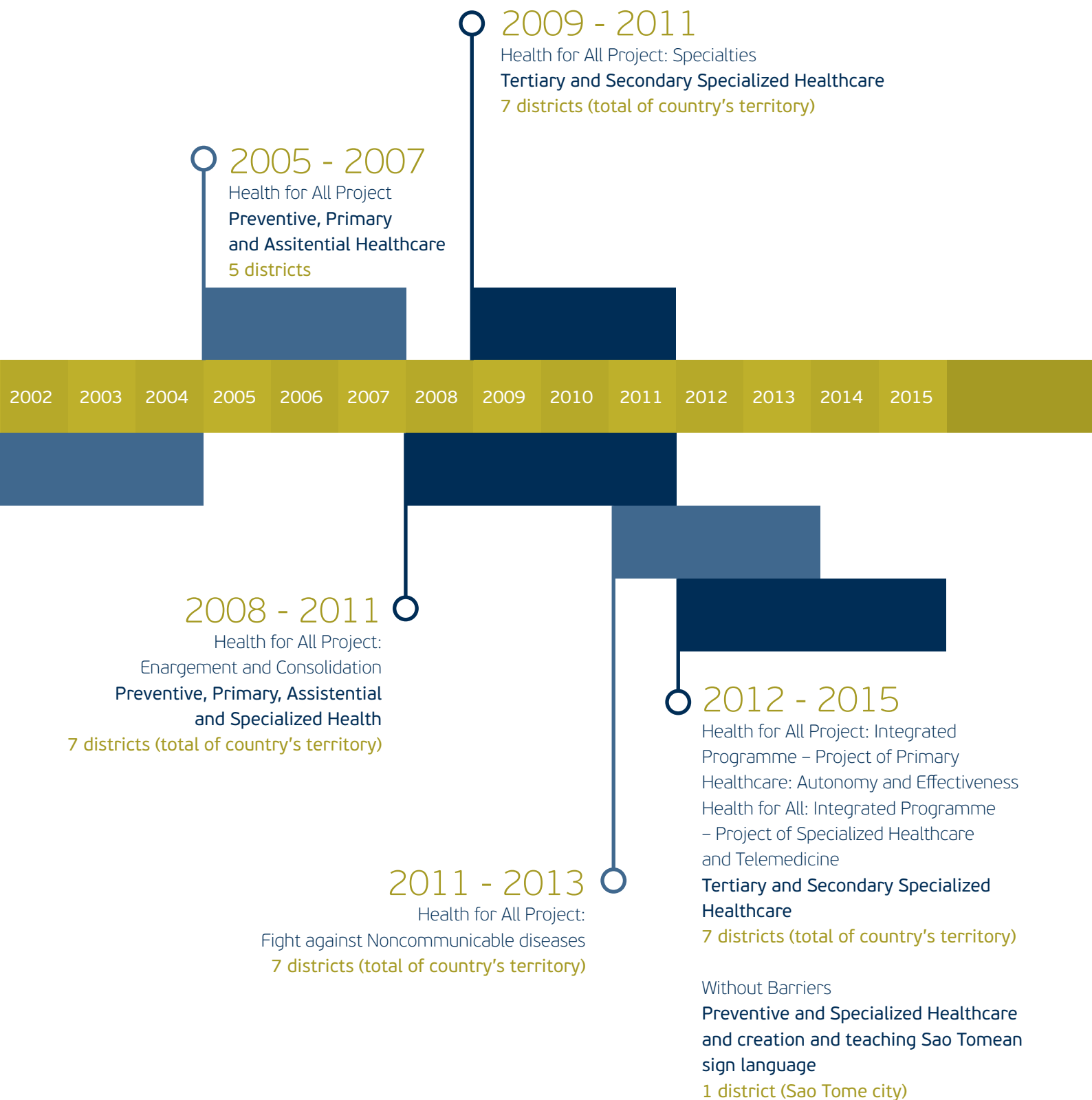
2015 | **Merit Municipal Medal** given to IMVF in recognition of its contribution in the area of cooperation by the City Council of Palmela.

Since 1988 intervening in Sao Tome and Principe in the health sector...

1988 - 1994
Health Project Mé-Zochi
Primary Healthcare
1 district

1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001

1995 - 2004
Project in Support of Preventive and Primary
healthcare in Mé-Zochi and Cantagalo Districts
Preventive and Primary Healthcare
2 districts





Ministério da Saúde
e Assuntos Sociais
de São Tomé e Príncipe

