

# The impact of the use of information and communication technology in Primary Health Care in the territory of Carnaubais, Piauí State, Brazil

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## Abstract

*The article describes the implementation of "Telessaúde Brasil Redes" Program in a region in the state of Piauí.*

**Keywords:** Primary Health Care; Telemedicine; Health Communication.

## Resumen

**El impacto del uso de las tecnologías de la información y comunicación en la Atención Primaria de Salud en el territorio de Carnaubais, Piauí, Brasil**

*El artículo describe la implementación del "Telessaúde Brasil Redes" Programa en una región el Estado do Piauí.*

**Palabras-clave:** Atención Primaria em Salud; Telemedicina; Comunicación em Salud.

## Resumo

**O impacto do uso das tecnologias de informação e comunicação na Atenção Primária à Saúde no território de Carnaubais, Piauí, Brasil**

*O artigo descreve a implantação do Programa Telessaúde Brasil Redes em uma região do Estado do Piauí.*

**Palavras-chave:** Atenção Primária à Saúde; Telemedicina; Comunicação em Saúde.

## INTRODUCTION

The “ Telessaúde Brasil Redes” Program is a national action launched in 2011 by Ordinance 2,554, which seeks to improve the quality of care and primary care in the Unified Health System (SUS), promoting the qualification in service of Family Health Care Teams, increasing the solvability of health care provided to the population and strengthening the model of attention based on the primary care as a gateway and ordering of the health system.

The implementation of the Telehealth Project in the Territory of Carnaubais occurred very satisfactorily because 100% of the 18 participating municipalities made the purchase of the essential computer equipments and, after four years of operation, it offers significant improvement in assistance.

The objectives of this initiative are:

- quality improvement of service in Primary Health Care in the Unified Health System (SUS), with positive results in solving the primary care level;
- reproducing the deployment strategies of telehealth tool in the service routine of primary health care of the Territory of Carnaubais.
- expressive reduction of costs and travel time;
- fixing of health professionals in places with difficult access;
- best agility in the health service provided.

The Carnaubais Territory is located in northeastern Piauí state, a region of semi-arid feature, covers an area

of 19,653.77 square kilometers representing 7.81% of the state area and consists of 16 municipalities (Figure 1) . The total population of the territory is of 168,037 inhabitants (including Capitão de Campos), of which 84,421 live in the rural area, which corresponds to 50.24% of the total. It has 17,313 family farmers, 2,684 family settlers and 2 *quilombolas* communities. Its HDI average is 0.60.

## METHOD

The implementation methodology of telehealth was based on meetings between managers, meetings with municipal polo management, visits to the realities of the participating municipalities, training of professionals involved in the project / primary care, meeting with the State University of Piauí.

In 2011, with the arrival of 70% of the financial resources, the municipal secretaries of health from the Territory of Carnaubais made the purchase of computer equipments required for the project, although it was spent a long time due to local political issues. Next it was structured the Telehealth Center of the Territory of Carnaubais based in the city of Campo Maior and supported by the Center of Technology in Health from the School of Medicine of Federal University of Minas Gerais (CETES / FM / UFMG), because of little experience from Piauí State with the telehealth tool. Then, with the hiring of a coordinator, a computer technician and a field monitor, the deployment works began to be made effective.

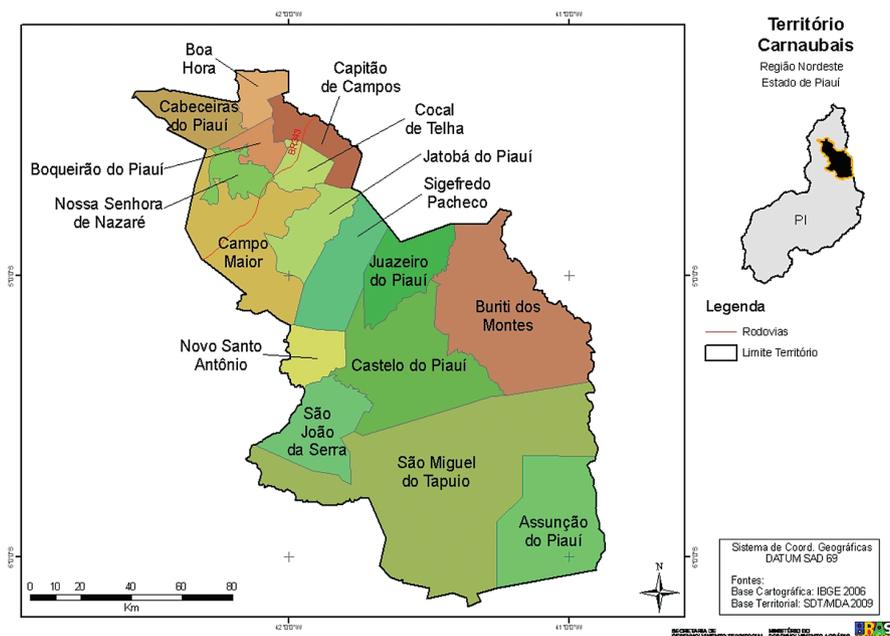


Figure 1 - Territory of Carnaubais, Piauí State, Brazil.

The technical team moved to each linked municipality and conducted training on the platform and registration of all top-level professionals of the Family Health Strategy. In 2014, we included all professionals connected to the Centers of Support for Family Health (NASF) and also to “Mais Médicos Program”. Yet in 2014, the health municipal secretaries of the Territory approved an ordinance, at the level of health region, linking the compliance of the minimum goals of telehealth to the resource from the PMAQ. Currently, the Telehealth Center of the Territory of Carnaubais performs the daily monitoring of the use of the tool by the professional of family health strategy and meets with serious difficulties in using the new platform.

## CHALLENGES

- effective incorporation of this tool by Primary Health Care professionals in their daily activities;
- minimize the problems in using the new platform;
- creation of regulatory protocols;
- training of the average level of health care professionals for the use of this tool;
- continue with an impressive tool for reducing referrals, and consequent improvement of access and quality of users in Primary Health Care.

## RESULTS

The proposed objectives were partially achieved, which reflect the importance given by the professionals to the tool, since it provided an opportunity to improve the resoluteness of Primary Health Care, promoting satisfaction and safety professional, the time it strengthens the process of continuing education through thematic videoconferences. Unfortunately some professionals are resistant to non-use of telehealth tool, especially medical professionals, but we still insist and give good reasons for using it.

## CONCLUSION

It is clear that the experience of computer usage and use of telehealth tool definitely is changing paradigms for the democratization of health from the perspective of universalization, the effectiveness and the qualification of actions on the territory of the Carnaubais, state of Piauí.