

Experience report of telehealth support from the Medical School of Federal University of Minas Gerais for the telehealth centers of Piauí State

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Abstract

This is an experience report, whose aim is to describe the support from the Technology Center in Health of Medical School of Federal University of Minas Gerais to the Intermunicipal Telehealth Services of Piauí state (Carnaubais, Cocais and Floriano). The propositions of deployment strategies showed that this model can be used as support actions to monitor the implementation planning of the Telehealth Centers. The experience allowed us to know peculiarities and plan guidelines for the services and managers.

Keywords: Health Services; Telemedicine; Planning.

Resumen

Relato de experiencia del apoyo del núcleo de telesalud de la facultad de medicina de la Universidad Federal de Minas Gerais al núcleos de telesalud del Estado de Piauí

Relato de experiencia cuyo objetivo es describir la experiencia de apoyo del Núcleo de Telesalud de la Facultad de Medicina de UFMG a los Núcleos Intermunicipales de Telesalud del estado de Piauí (Carnaubais, Cocais y Floriano). Las propuestas de estrategias de puesta en operación demostraron que este modelo puede utilizarse para elaborar acciones de apoyo conducentes a monitorear la planificación de implementación del Núcleos de Telesalud. La experiencia permitió conocer las peculiaridades y planificar orientaciones destinadas a los Núcleos y sus gestores.

Palabras-clave: Servicios de Salud; Telemedicina; Planificación.

Resumo

Relato de experiência de apoio do núcleo de telessaúde da Faculdade de Medicina da Universidade Federal de Minas Gerais aos núcleos de telessaúde do Estado do Piauí

Relato de experiência de apoio do núcleo de telessaúde da Faculdade de Medicina da UFMG aos núcleos intermunicipais de telessaúde do Estado do Piauí (Carnaubais, Cocais e Floriano). As estratégias colocadas em prática demonstram que esse modelo pode ser utilizado como suporte ao plano de implantação de núcleos de telessaúde. A experiência permite conhecer as particularidades e elaborar planos orientadores dos núcleos e seus gestores.

Palavras-chave: Serviços de Saúde; Telemedicina; Planejamento.

INTRODUCTION

This paper presents the experience report of support from the Technology Center in Health of the Medical School of Federal University of Minas Gerais (CETES - FM / UFMG) to the Intermunicipal Telehealth Services of Piauí State.

CETES began its activities in 2007 with the Ministry of Health (MS) support through the Secretariat of Work and Education Management in Health (SEGETES) responsible for formulating guiding public policies of the management, training and qualification of the health workers in Brazil. CETES presents itself as a scientific technical center of telehealth and has tradition in building methodologies of telehealth resources and it is able to replicate the experience acquired by studies and practices. The National Telehealth Program, established in 2007 and expanded in 2011 as Brazil Telehealth Network Program, made the structuring of new telehealth services in Brazil by adding 63 new institutions, including the state of Piauí. This state, located in the northwest of the northeast region of Brazil, with a land area of 251,611.932 km² and an estimated population of 814,230 inhabitants (IBGE, 2010) met proposed criteria for the implementation of telehealth services, including: municipalities with HDI less than 0.500; geographical access barriers; municipalities with population less than or equal to 100,000; municipalities with the Family Health Strategy coverage equal or higher than 50%. Thus, it was created three intermunicipal telehealth centers that opted for the distribution of municipalities by the existing regional health: Carnaubais, based in the municipality of Campo Maior, comprising 18 participating municipalities; Floriano, based in the municipality of Floriano, with 33 participating municipalities and; Cocais, municipality seat of Piripiri, which covers 21 municipalities served by the program.

After 2012, the Department of Primary Care (DAB) of the Ministry of Health, requested follow-up of the Telehealth services by CETES, which would start to coordinate and support the planning and the implementation of telehealth resources for the expansion of services offered by health teams and promote changes in care practices and work organization process through the provision of teleconsultations, web conferences and formative second opinion. The aim of this study is to describe the process of implementation and training of the coordinators and their teams in relation to the conception, incorporation and telehealth resource management.¹⁻⁷

METHODOLOGY

This is a descriptive study of the major activities undertaken by CETES to help implement the points of telehealth of Brazil Telehealth Network Program in the three inter-municipal centers of Piauí state. The performance of CETES occurred in several strategic levels, such as continuous monitoring of the stages of planning, organization and implementation of the points of telehealth, coordinator training, program presentation to the municipal and state management and practical training of professionals. The main strategies implemented, both in Mato Grosso do Sul and in Piauí, consisted of a) planning and meetings with state, municipal administrations and coordination to provide details of the support project; b) continuous communication, through videoconferences, to the construction and applying of the implementation process of telehealth; c) realization of technical visits to the services to present every step of telehealth management and the importance of using this technology; d) consulting in the area of information technology for the installation of the network infrastructure; e) training of Family Health Teams (ESF's) for the use of telehealth services involving the specialties included in the relationship of CETES FM / UFMG services.

RESULTS

The coordination and CETES field team monitoring participated in the program implementation. This team has experience in public management in the health area and in structure of information systems. The methodology adopted was the holding of strategic meetings for planning and development of the telehealth project with the coordination of Telehealth Centers of Piauí state and CETES FM UFMG. The support took place in two phases from 2013 to 2015.

In the first period, in-person meetings were conducted with the strategic levels of state management and telehealth centers. It was chosen the execution of videoconferences for guidance on the process of work and specifications for equipment purchase of 270 points provided in the three centers. From the technical structuring, visits were carried out at the headquarters of each center for awareness of managers and Primary Health Care professionals, through launch event.

In the second period, it was conducted training to access to the teleconsulting platform. Initially, they were

trained and registered on the platform to use the telehealth system, 169 professionals from 75 municipalities. In subsequent months, the Piauí telehealth services started to monitor the interactions of professionals on the use of teleconsultations as well as organize and perform activities related to the training of other professionals.

Figure 1 shows the gradual increase in the number of teleconsultations performed in the state in the years 2013 (August to December), 2014 and 2015.

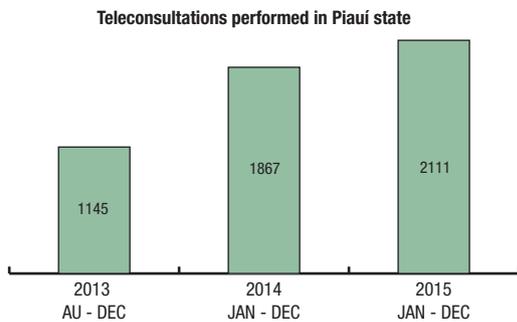


Figure 1 - Evolution of teleconsultation number held in the state of Piauí in the years 2013, 2014 and 2015.

Figure 2, it is observed the number of teleconsultations requested by each intermunicipal telehealth service. In the second semester of 2013, the requests were made with the support of CETES that extended to the year 2014. The year 2015 was marked by the autonomy of the services in relation to the training and monitoring activities.

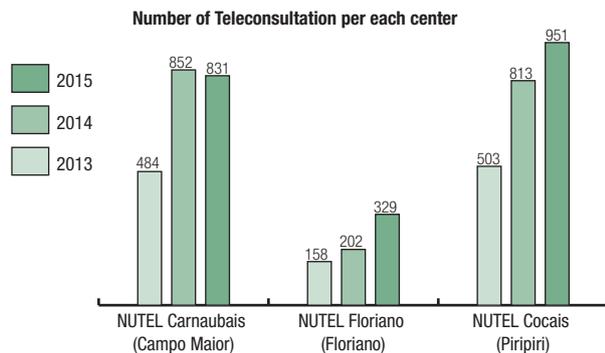


Figure 2 - Number of teleconsultations per each service, from August 2013 to December 2015.

Figure 3 presents the use of asynchronous teleconsulting according to the professional category of the applicant in the period of August 2013 to December 2015, highlighting the medical category.

Figure 4 shows the medical specialties most requested from August 2013 to December 2015.

Distribution of teleconsultations requested by professional category

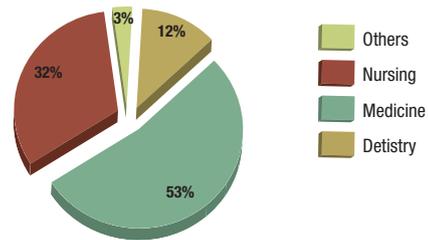


Figure 3 - Distribution of teleconsultations requested by professional category.

Specialties most requested

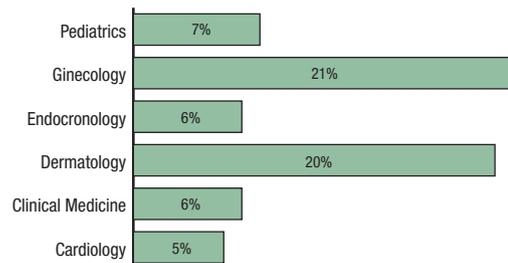


Figure 4 - Most requested medical specialties.

DISCUSSION

CETES proposed to contribute in this project, with the following dimensions: structuring telehealth centers and training of managers. The training was carried out through application of distance-training course called “Structuring of telehealth projects: main aspects involved”, addressed to managers and coordinators of telehealth centers in Brazil. The participants in the course have showed, initially, insufficient knowledge about management in telehealth. The perception of this gap in knowledge culminated in a positive move for the acquisition of these skills. In the second phase of technical visits, with more prepared cores for the equipment purchase and has already been deployed 132 points of telehealth among the 270 planned, it was held at the headquarters of the cores, a first training cycle for the ESF’s, with the participation of the coordinators. As a result of this stage, it was recommended a greater proximity between cores and ESFs, besides the computerization of all the telehealth points.

It was verified a progressive increase in the number of teleconsultation requests since the implementation of the project in the second semester of 2013 until the year 2015. This growth can be related to the legitimacy of the coordinations next to the telehealth points initially

deployed. It is still observed to have barriers, with respect to connectivity, in the centers where it was not possible to implement the teleconsultations.

CONCLUSION

The support of an experienced institution in Telehealth was essential to enable the implementation of Brazil Telehealth Networks Program in the state of Piauí. It was found that there is still a gap in what concerns the management of telehealth resources and technological knowledge by the members of the centers.

The poor infrastructure can be an inhibitive barrier to the solidity of activities as well as the application of telehealth resources by the management. Regarding the proposal to support the telehealth points in an Institution, we can highlight the success obtained in the partial implementation of them, but it is still necessary to mature and give greater consistency to the methods used.

Especially by the services, we need to continuously review the implementation of strategies and implementation of telehealth resources in order to promote the increase and qualification of the services offered. It is aimed that the strategies adopted in this deployment contribute to the improvement of existing practices.

REFERENCES

1. Brasil. Ministério da Saúde. Manual de Telessaúde para Atenção Básica. Atenção Primária à Saúde. Brasília: Ministério da Saúde; 2012. 123 p.
2. Brasil. Ministério da Saúde. Telessaúde Brasil Redes. Brasília: MS; 2010.
3. Brasil. Ministério da Saúde. Gabinete do Ministro. Portaria nº 2.554, de 31 de outubro de 2011. Institui, no Programa de Requalificação de Unidades Básicas de Saúde, o Componente de Informatização e Telessaúde Brasil Redes na Atenção Básica, integrado ao Programa Nacional Telessaúde Brasil Redes. Diário Oficial da União, Brasília, DF, 2011b, Sec. 1, p. 28-9.
4. Brasil. Ministério da Saúde. Gabinete do Ministro. Portaria nº 2.546, de 27 de outubro de 2011. Redefine e amplia o Programa Telessaúde Brasil, que passa a ser denominado Programa Nacional Telessaúde Brasil Redes (Telessaúde Brasil Redes). Brasília: MS; 2011.
5. Piauí. Área territorial do Estado do Piauí. [Citado 2015 maio 12]. Disponível em: <http://www.ibge.gov.br/home/geociencias/areaterritorial/principal.shtm>
6. Instituto Brasileiro de Geografia e Estatística. Índice de Desenvolvimento Humano. [Citado 2015 maio 12]. Disponível em: <http://www.cidades.ibge.gov.br/xtras/temas.php?lang=&codmun=221100&idtema=118&search=piau%7Cteresina%20%26Dndice-de-desenvolvimento-humano-municipal-idhm->
7. Brasil. Ministério da saúde. Portaria Nº 35, de 4 de janeiro de 2007 (Revogada pela PRT GM/MS nº 402 de 24.03.2010). Institui, no âmbito do Ministério da Saúde, o Programa Nacional de Telessaúde. Brasília: MS; 2007.