Brazilian Journal of health Review

Theory of change in the evaluation of telehealth in care support to Primary Health Care in Brazil

Teoria de mudança na avaliação de telessaúde no apoio à Atenção Primária à Saúde no Brasil

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ABSTRACT
Background: Telehealth for care support in Public Health is a strategy to strengthen, qualify and increase the resolutivity in health care. However, it still faces challenges for widespread use. Introduction: Brazil is a developing country, whose characteristics of the health system and the working conditions of professionals can be improved with the use of telehealth services provided by a national, public and free program. To understand the processes of use of this program, this article presents a model for evaluation of telehealth for care support in Primary Care in Brazil, guided by the Theory of Change. Materials and Methods: It is a qualitative study, built in four stages: bibliographic analysis; elaboration of the theoretical-logical model; validation by consensus conference among experts; construction of the

Brazilian Journal of health Review

analysis framework and measures to evaluate the use of services in care support. Results and Discussion: The proposed model resulted in a logical framework with three dimensions: organizational and management scope; knowledge and mastery of technology; human scope and comprehensive health care model. The proposed indicators are guided by the impact of the care support provided by telehealth in Primary Health Care: increase of the quality of care and resolubility; reduction and qualification of referrals to other levels of care; expansion of access with reduced waiting time for services; reduction of costs and optimization of the use of resources within the health system; organization and strengthening of networking; satisfaction and professional fixation in locations far from major centers. Conclusions: A proposed evaluation of telehealth, which aims to understand processes and stimulate change, is useful and necessary to ensure the achievement of the results of the program in the qualification of health care.

Keywords: Telehealth; Primary Health Care; Program Evaluation.

RESUMO

Antecedentes: A telessaúde para apoio à saúde pública é uma estratégia para fortalecer, qualificar e aumentar a resolutividade na atenção à saúde. No entanto, ainda enfrenta desafios para uso generalizado. Introdução: O Brasil é um país em desenvolvimento, cujas características do sistema de saúde e das condições de trabalho dos profissionais podem ser melhoradas com o uso de serviços de telessaúde prestados por um programa nacional, público e gratuito. Para entender os processos de uso desse programa, este artigo apresenta um modelo de avaliação da telessaúde para apoio à atenção na Atenção Básica no Brasil, orientado pela Teoria da Mudança. Materiais e Métodos: Trata-se de um estudo qualitativo, construído em quatro etapas: análise bibliográfica; elaboração do modelo teórico-lógico; validação por conferência de consenso entre especialistas; construção da estrutura de análise e medidas para avaliar o uso dos serviços no apoio à assistência. Resultados e Discussão: O modelo proposto resultou em uma estrutura lógica com três dimensões: escopo organizacional e gerencial; conhecimento e domínio da tecnologia; escopo humano e modelo abrangente de assistência médica. Os indicadores propostos são orientados pelo impacto do apoio assistencial prestado pela telessaúde na Atenção Primária à Saúde: aumento da qualidade da assistência e resolubilidade; redução e qualificação de encaminhamentos para outros níveis de atenção; expansão do acesso com tempo de espera reduzido para serviços; redução de custos e otimização do uso de recursos no sistema de saúde; organização e fortalecimento de redes; satisfação e fixação profissional em locais distantes dos grandes centros. Conclusões: Uma avaliação proposta da telessaúde, que visa entender processos e estimular mudanças, é útil e necessária para garantir a obtenção dos resultados do programa na qualificação da atenção à saúde.

Palavras-chave: Telessaúde; Atenção Primária à Saúde; Avaliação do Programa.

1 INTRODUCTION

The use of information and communication technologies (ICT) in health offers great benefits, especially in places with limited resources1,2. Telehealth for care support deals with initiatives relevant to developing countries such as Brazil, especially for supporting

professionals working in care networks, in order to strengthen and broaden the range of services, reduce professional isolation and promote knowledge sharing among health professionals for the implementation of quality care3-6.

The socio-demographic characteristics of Brazil are reproduced in the health system, implying unequal distribution of medical resources and health services, with the presence of isolated and difficult access areas. In such conditions, the application and development of telehealth is quite timely, and can contribute to improvements in health systems for greater benefits for managers, professionals and users7.

The Brazilian National Telehealth Network Program (Telehealth Brazil Networks) was structured by the Ministry of Health from regional centers with two complementary objectives: care support and support for continuing education support8-10. The care support has the purpose of expanding and facilitating the access of the users to services and increasing the resolutivity in Primary Health Care (PHC) from the diagnostic and therapeutic support to professionals and health workers, inducing a model of attention focused on the user and to offer positive responses to their needs11.

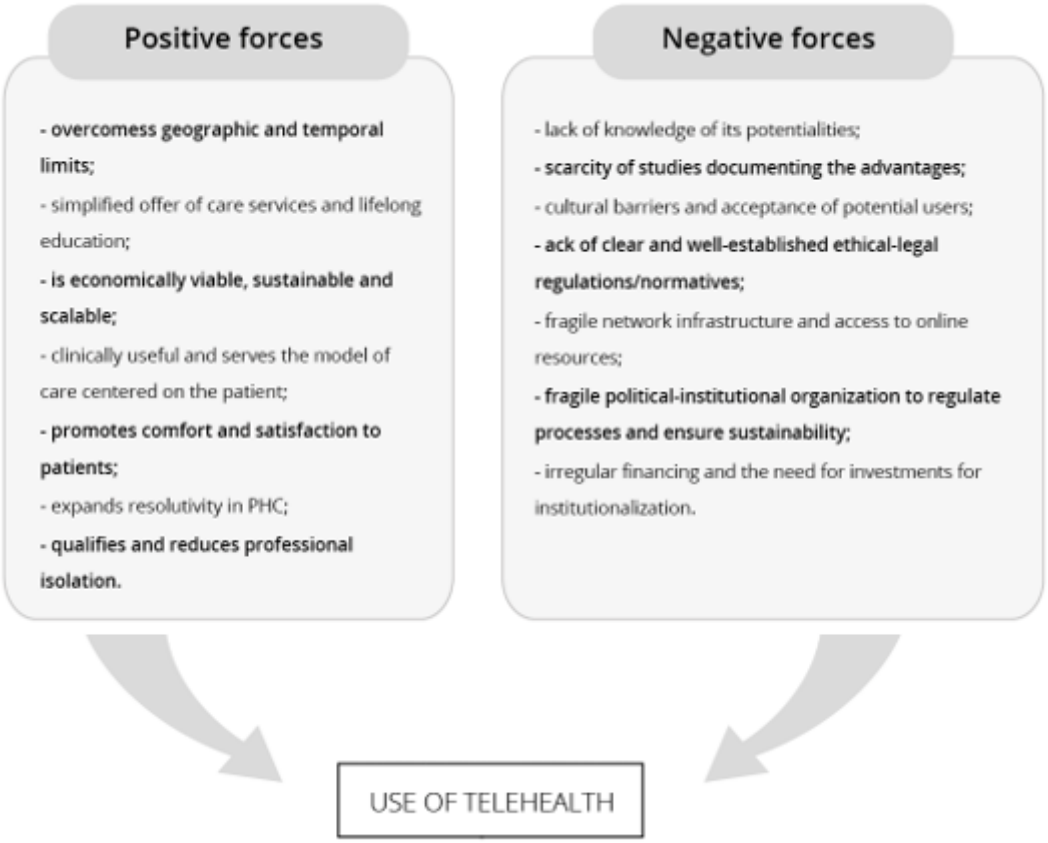
Telehealth actions qualify the competences of professionals in PHC, increasing the capacity to respond to problems and the resolutivity in this level of attention12. In addition, they provide cost reduction in the execution of the exams and the transportation of the patients13. Despite the potential benefits, the use of telehealth is still below that provided by its services, both nationally and internationally14. An analysis of the determinant forces in this situation is presented in figure 1, with a representation of the positive or negative influence for the expansion of its use in care support in PHC4-6,15-18.

Developing countries present little evidence regarding telehealth and its effects5, the same occurring in relation to the application of their services. The literature does not present, so far, a model for evaluating the use of telehealth tools and services in PHC16,18,20. The ‘use’, in this context, should be understood as the act of using telehealth with some purpose, benefit or utility in health practice, to strengthen the theoretical base that guides actions and to qualify health services and the care offered to its users. One possibility to approach this issue is the Theory of Change (TC), presenting the description and possibilities of telehealth application for care support, in order to potentiate the transformations to reach the results.

The concepts of TC in literature are diverse. It can be seen as a product – graphic element; as an ongoing process with tools that guide action21; or as the union of process

and product, involving those interested in the pursuit of a common goal, the result of which is a logical model that guides the development of action21-23.

Figure 1. positive and negative forces on the use of telehealth for care support in PHC



Soure: elaborated by the authors from a scheme proposed by youg at. al. 2014

This article presents a model proposal oriented by the TC for evaluating the use of telehealth for care support in PHC. It is hoped to contribute to evaluations in Public Health, whose results allow to increase the use of telehealth and make it effective and sustainable.

2 MATERIALS AND METHODS

A qualitative approach study, developed in four stages: bibliographic analysis; elaboration of the theoretical-logical model; validation by consensus conference among experts; analysis framework and measures to evaluate the use of services in care support.

In the first stage, it was carried out a survey and analysis of documents and scientific publications related to telehealth for care support in the context of PHC in institutional sites (Ministry of Health – Department of Primary Health Care and Secretariat of Labor

Management and Health Education and thesis portal and dissertations of the Coordination of Improvement of Higher Education Personnel – Capes) and on bibliographic bases (PubMed of the Medical Literature Analysis and Retrieval System Online - Medline; Latin American Literature in Health Sciences - Lilacs, via Virtual Health Library - VHL; Scientific Electronic Library Online - SciELO; Scopus; Web of Science). The search terms were: 'telehealth or telemedicine', 'Primary Health Care', 'use or application', 'evaluation', and their correspondents in Spanish and English, as well as the variations proposed in DeCS (Health Sciences Descriptors) and MeSH (Medical Subject Headings) for the terms. The reading of the evidence contemplated the studies that dealt with telehealth for support between professionals and not for distance interaction between professionals and patients.

The construction of the proposed theoretical-logical model of the use of telehealth for assistance in PHC, second stage of the study, was based on the theoretical revision, contemplating the theory that guides the care support by means of telehealth, the contexts that surround it and the determinants for its use by health professionals in PHC, explaining the elements that allow its operationalization to achieve the expected results. In addition to the analysis of specific literature on care support, the proposal was guided in the theoretical model of telehealth nucleus of the Brazilian National Telehealth Network Program10.

For the third stage, validation of the theoretical-logical model by consensus conference with experts, 18 specialists were invited (one coordinator and two former coordinators of Telehealth Brazil Networks, three former coordinators of the Telehealth Nucleus Santa Catarina and 12 researchers in the area telehealth, continuing education and health evaluation), selected from publications in the areas, experience in research or linking for telehealth work in the national scenario. The model built by the researchers was sent electronically for appreciation of the experts using Survey Monkey® software (https://en.surveymonkey.com). There was unanimous approval of the ten experts who have returned, and the suggestions made were followed, including that of keeping in the model only the services regulated and allowed in Brazil.

The adaptation of the theoretical-logical model with the orientation of the Theory of Change20-23 was the fourth stage. The TC guided the graphical representation of the logical relations between the actions and the results expected for the intervention24. The design of the logical framework was guided by the proposal of the Overseas Development Institute (ODI) to present the path toward results, including the actors involved23. The context of the

program, the activities carried out, the outputs and results expected (from established measures) and the intended impact21 were taken into account.

This study integrates the Research Project 401211/2013-4 – Evaluation of the impact of the services offered by the Telehealth Nucleus SC in the improvement of the quality in Primary Care of Santa Catarina, funded by the Call MCTI/CNPq/MS - SCTIE - Decit nº 08/2013 – Research on continuing education for the SUS and dimensioning of the health workforce. It was approved by the Research Ethics Committee of the Federal University of Santa Catarina in 2016, according to opinion nº 1.466.605.

3 RESULTS

Theoretical-Logical Model for evaluation of the use of telehealth for care support in Primary Health Care

The proposal of a theoretical-logical model for evaluating the use of telehealth for care support in PHC is presented in figure 2 and seeks to detail the chain of activities and effects that summarize telehealth for healthcare assistance, linking resources and activities to results25. The construction was guided by the theoretical model developed for Telehealth Nucleus of Telehealth Brazil Networks10.

The model provides the representation of the possibilities of using telehealth for care support at two levels: a) second opinion (consultation between health professionals) and, b) telepropedeutics or complementary examinations from a distance4,26, in Brazil represented by teleconsulting and telediagnostic. Teleconsultation and telemonitoring are not considered because the interaction between professional and patient with distance technologies was not regulated in Brazil27. The use of alternatives to face to face consultation is still a target for ethical, legal and fear questions about the quality of care provided to the patient15,28.

The care support services have the potential to speed up care, regulate and qualify the access to experts, reduce waiting times for care, avoid patient withdrawal for other services, reduce and optimize health costs3,16,29-32. In addition, they can promote the construction of health networks that connect professionals and provide an exchange of experiences, support and access to scientific information and evidence3,16,32, greater resolubility care and benefits to the users of the system.

Articulated to the regulation for medium complexity, the care support can help in the resolution of cases that are sensitive to the actions in the PHC, with management of the queues, identification of repressed demands, implementation of access control protocols and

clinical guidelines, making it possible to broaden and qualify the access to the specialized level when necessary9. In models of integral health care, teleassistance in PHC can contribute to the achievement of 85% of resolubility in this level of attention, avoiding iatrogenesis, professionals acting as focal specialists, the isolation of the newly formed and the waste of public resources12.

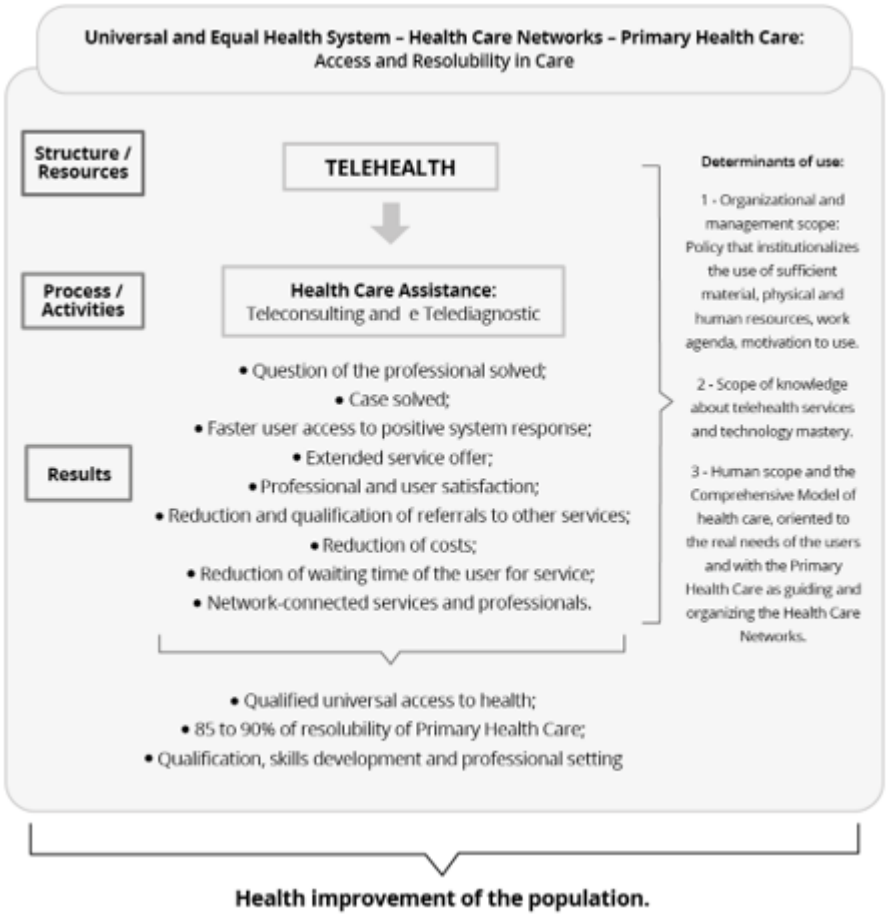
The determinants for the achievement of results are related to: a) organizational and management aspects – regulation, infrastructure, funding, material and human resources; b) knowledge and domain of services and technology, with diffusion from the professional training to its performance in health services; c) conception of health care, which must be oriented to the model of comprehensive care, ordered and coordinated by PHC4-6,17,18. These aspects exert force on the use of telehealth for care support in PHC.

The use of telehealth for care support faces practical difficulties related to the structure, namely: lack of cohesion and organization among the actors that work on telehealth, lack of time to access the services, obstacles to follow the speed with which the technological innovations occur, unequal distribution of access to the necessary infrastructure, wide diversity of information systems in use and safe and ethical data management33.Rogers' theory of innovation diffusion, applied in a barrier evaluation at telehealth in Mexico, demonstrated that the decision to innovate depends on established communication networks with the actors involved and respect for established agreements. To understand the context of its insertion and the reality as it develops can benefit the achievement of results34.

Still, in the external context one must take into account the characteristics of local health management and the center of telehealth involved, in order to identify the weaknesses and potentialities present in each reality, not forgetting Helitzer et al35 the economic issues and the importance of investment to ensure the sustainability of telehealth, as the World Health Organization and the Pan American Health Organization36 point out.

Brazilian Journal of health Review

Figure2. theoretical-logical model for evaluation of the use of telehealth for care support in PHC.



Source: The authors (2018)

Logical framework guided by the Theory of Change, indicators and measures for evaluation of telehealth in the care support of PHC.

The Overseas Development Institute (ODI) proposal brings TC as a way of working to search for results from changing behaviors, relationships, action and activities of people, groups and organizations. Its conception is that change occurs primarily through a series of small, gradual steps and that its sustainability is related to changes in the behavior of people and not just in what they produce23. The proposed framework of analysis (Table 1) contemplates the chain of actions developed and considers the context, respecting the different determinants (three dimensions) that can influence the process37.

The (1) Organizational and management scope Dimension proposes criteria for analysis and judgment of the technological structure necessary for the use of telehealth services. It contemplates the existence of an internet network and enough quality equipment, which enables health professionals to connect the telehealth platform15 and conditions for

the incorporation of routine support, related to the regulation of the use of telehealth services in the work process of the professionals, with organization of the work agenda of the teams that allows this practice and motivation to professionals9,27.

In the (2) Dimension Scope of the knowledge and technology mastery is sought the analysis of the knowledge by the professionals regarding the existence of telehealth and the services of care support offered, their application in the work and for qualification, as well as the capacity to use the services provided through a specific platform.

Finally, the (3) Human scope of the comprehensive health care model Dimension proposes to look for care support oriented by the individuality of the needs in a strengthened PHC and able to coordinate and guide the care to its users. The central axes of telehealth for care support: a) 'Access' understood as the entrance in health services, to welcome users and solve their needs38, eliminating distance as a barrier insofar as it extends the ability responses of PHC to the health needs of the users39; b) 'Care' covers the process of implementation of therapy for those seeking health services, where telehealth provides support to health professionals for the qualification of care40,41; c) 'Regulation' deals with the organization of flows and the route of users through the health system, organizing care and connecting the different points of attention of the network to promote communication in team and between teams; d) 'Networking' contemplates the role of telehealth to promote connection between the different professionals, teams and services that compose the health system in search of comprehensive care to the users through strengthened and satisfied professionals.

Brazilian Journal of health Review

Table 1. logical framework of the supply and use of telehealth for care support in PHC (continued)

External Context - related to the Program: Health System guided by the PHC and the comprehensive model of attention focused on the users. Institutional budget of the Ministry of Health (and others when available).

	Inputs – what we invest / conditions:	*Activities – what we do*	*Outputs – goods and services produced*	*Outcomes – what happens due to activities*	*Impact*
Internal Context - related to the provision of services for care support: Nucleus Telehealth operating, with structure and management team and qualified multiprofessional technique. Health professionals working in PHC and with support needs.	***1. Dimension: Organizational and management scope***				Qualification and strengthening of PHC teams. Expansion of access and agility in service. Reduction and qualification of referrals to other levels of attention. Reduction of costs. Networked professionals and services. Reach of a health care model, guided by integrality. Professional fixation in PHC.
	Availability and sufficiency of structure and resources for the use of telehealth (in working hours) by professionals and teams.	1. Technological provision and incentive to the computerization of the units.	Connectivity, existence of complete and operant equipment.	Access to computers and the internet in all basic health units.	
		2. Organization of work process in health services.	Regulations that guarantee the conditions of use of the support resources during working hours.	Use of telehealth by professionals and health workers.	
	2. Dimension: Scope of the knowledge and technology mastery				
	Health professionals know that telehealth exists, understand how it can support them for care and can access services and navigate the platform.	1. Dissemination of telehealth (folders, events, social networks, training).	Knowledge about services and understanding about applicability.	Recognition and regular use of telehealth as a supporting care tool.	
		2. Providing platform and support for permanent access and continuous use of services.	Simple and easy-to-navigate platform with immediate technological support when needed.	Professionals and registered health workers can access the services, navigate the platform, request support and visualize the returns.	

Evaluation: understanding and identification of the forces that potentiate or hinder the process of using telehealth for care support in PHC.

Source: Elaborated by the authors based on Learning for Sustainability (2017)

Brazilian Journal of health Review

Table 1. logical framework of the supply and use of telehealth for care support in PHC (conclusion)

External Context - related to the Program: Health System guided by the PHC and the comprehensive model of attention focused on the users. Institutional budget of the Ministry of Health (and others when available).					
	Inputs – what we invest / conditions:	*Activities – what we do*	*Outputs – goods and services produced*	*Outcomes – what happens due to activities*	*Impact*
	3. Dimension: Human scope of the comprehensive health care model				
Internal Context - related to the provision of services for care support: Nucleus Telehealth operating, with structure and management team and qualified multiprofessional technique. Health professionals working in PHC and with support needs.	Care support to health professionals that promote: expansion of the offer of actions and services; diagnosis, planning and implementation of care with safety and quality; teamwork, organized and articulated to other points of attention; interdisciplinarity and regionalization driven by local needs.	1. Support for expanding professional skills and increasing the supply of services.	Access: - Professionals and teams with greater capacity to respond to users' needs. - More actions / services offered in PHC.	Reduced time for problem solving. Reduction of the need for referrals to other services.	Qualification and strengthening of PHC teams. Expansion of access and agility in service. Reduction and qualification of referrals to other levels of attention. Reduction of costs. Networked professionals and services. Reach of a health care model, guided by integrality. Professional fixation in PHC.
		1. Support for diagnosis and assistance.	Care: - Safe professionals to perform diagnosis, plan the management and implement care. - Professionals encouraged to think of other ways of caring.	Increased resolution capacity. Promotion of equity in access and qualification of referrals. More qualified assistance.	
		1. Support for referrals by the PHC to health demands. 2. Support for the implementation of flow guiding protocols that include the use of telehealth. 3. Participation in the construction and implementation of clinical protocols.	Regulation: - Assistance to professional conduct for prevalent problems. - Shared construction of protocols between Telehealth and management bodies. - Standardization of clinical guidelines.	Facilitation of work and communication and articulation in team and PHC with other levels of attention. Regulation of flows. Organization of health care.	
		1. Accessible technical support offer. 2. Promotion of dialogue space guided by real local needs.	Networking: - Formation of a technical support network. - Regionalization of assistance.	Resolution responses to the needs of different contexts. Decrease in professional isolation. Professional satisfaction and fixation.	
Evaluation: understanding and identification of the forces that potentiate or hinder the process of using telehealth for care support in PHC.					

Source: Elaborated by the authors based on Learning for Sustainability (2017)

The indicators proposed in each of the dimensions are guided by the desired impact from the possible results with the assistance provided by telehealth in PHC: increase in the quality of care and resolubility in PHC, reduction and qualification of referrals to other levels of care, expansion of access with reduction of waiting time for services, reduction of costs and optimization of the use of resources within the health system, organization and strengthening of networking, satisfaction and professional fixation in places far from major centers10,12,16,42.

The proposed measures to evaluate the results are presented in table 2. The supply and use of telehealth for care support in PHC involves different actors – professionals from the telehealth centers, health managers, workers and health professionals10, who should be considered in the evaluation proposal and are the key informants in the evaluation.

Brazilian Journal of health Review

4 DISCUSSION

Personal and organizational factors are determinants of the use of telehealth for care support, with emphasis on training, support and motivation by the local health manager4, and can be positive or negative forces, insofar as they are or not present4-6,15-18. One of the main weaknesses relates to the lack of a political-institutional, organizational and bureaucratic structure that determines the difficulties of regulation and legalization for the maintenance and institutionalization of telehealth15.The offer of care support should be guided by a model of comprehensive health care ordered and coordinated from the PHC in a universal and equitable public health system. The services are offered from telehealth centers and should be planned to respond to the needs of the care network in which they are located10,34. This support is provided through teleassistance practices focused on the needs and demands of the user4,11,12, helping the decision-making of the professionals in service, while promoting PHE over time.

The development of an evaluation model of the use of telehealth for care support requires a deepening of the specific issues that influence this use and TC induces the explanation of how activities develop to produce the results that lead to the desired final impact, and allows to represent how activities can lead to specific outcomes43. Its foundations are in the area of program evaluation and the search for social transformations, being an adequate proposal for complex problems, such as the care support of telehealth, which involves improving care for users through the training of professionals23. The proposal validated with orientation of TC can be useful to understand this object and analyze the reasons that determine acceptability and interfere with its use, since TC has contributed to qualify the evaluation of complex interventions in the health area in order to raise its potential to be effective, sustainable and scalable44.

The identification of components, objectives and expected results guides the selection of indicators that respond to evaluative questions on the use of telehealth in care support, and the proposal of the model for qualitative analysis should consider non-homogeneity in the implementation of the use of services in the Brazilian scenario7. In this process, the participation of specialists allowed to define and clarify the objective-image, which can be complemented by the perspectives of users of telehealth services during the application of the model.

Brazilian Journal of health Review

table 2. indicators and measures to evaluate the supply and use of telehealth for care support in PHC

DIMENSION	SUB-DIMENSION	INDICATOR	MEASURES
Organizational and management scope	Technological supply	Equipment and internet for telehealth use	Internet and equipment available (computer and multimedia kit), working and in sufficient quantity (minimum 1 per unit) for professionals to use them.
	Conditions for incorporating care as routine	Organization of the work process in the PHC	Regulation through guidance documents that indicate the use of telehealth for care support.
			Work schedule in the PHC organized for use of telehealth.
Knowledge and mastery of technology scope	Dissemination of telehealth	Recognition of telehealth as a care tool	Knowledge of telehealth services available.
			Comprehension about the applicability of telehealth services to care support for PHC work.
	Use of the telehealth platform	Access and use of telehealth services through a simple platform.	Facility to access and navigate the platform, request support and visualize the returns).
Human scope and the comprehensive health care model	Access	Change in the availability of services in the municipality after the assistance	Assistance actions started to be carried out by professionals supported with their teams.
			Change in problem resolution time after support.
	Care	Diagnosis	Security to perform after-care diagnosis.
			Competence to plan interventions.
		Assistance	Security to promote care and handle cases after support.
			News ways of taking care from support.
	Regulation	Access protocols	Existence of flow-guiding protocols (RASs) that stimulate supply and access to support.
			Participation of telehealth in the existence of reference and counter-reference.
		Clinical protocols	Participation of telehealth in clinical protocols.
			Support with clinical indications of case management in the network.
	Networking	Decrease in professional isolation	Accessible technical support network.
		Regionalization of assistance	Spaces for debate and problematization of reality guided by complex local needs.
3	8	11	18

Souce: the authors (2018)

Evaluation models oriented by TC have allowed us to assess not only whether the results were achieved but to understand how and why each outcome was possible23,44 which will help to understand the barriers associated with telehealth, despite its benefits. The evaluation will allow us to review the intervention, processes and expected results, and contribute to qualify the understanding of how change occurs21. The model proposes learning to identify opportunities for achieving desired improvements so that the interested parties can adapt progress in seeking results; and allows the understanding of why the changes are produced in order to verify and map the extent of a problem and inform what is important23.

The logical framework interconnects the activities, results, purposes and objectives of an intervention, and its use allows monitoring and tracking changes in the implementation process and identifying deviations from the original plan. The external context, in the case

of interventions in the health system, is very complex, highly politicized and extremely fluid, which strongly influences the actions evaluated45. Using the TC makes it possible to establish a logical relationship between the actions and the results expected for the intervention and then select the indicators to measure these results24. In this way it is possible to propose an evaluation that explores the process and presents the possible intervention points to transform scenarios and potentiate the intervention.

The incorporation of health care services – teleconsulting and telediagnostic-, shows to respond to the needs of the PHC professionals and the existing fragilities to guarantee qualified and timely care to users9,27, but it is necessary to identify if these services are so understood, and if they have been used and incorporated by professionals to organize health care, optimize flows and promote articulation and networking.

The proposed evaluative model intends to look at the difficulties of accepting changes and new technologies and the professional capacities to use information technology, as well as the opinions on telehealth and its benefits15,33; the simplicity of technology so as not to be configured as barrier27; the knowledge and understanding of telehealth as a potential support to improve the quality of assistance, since a simple and easy navigation platform allows to enhance the use by professionals4.

In addition to the structure of the technological resources, it is necessary to identify if those involved know the telehealth, know how to use it and its experiences of use. It is also important to understand its clinical, operational and technical results that commit to the quality of care and to the safety of patients and professionals46.

In Brazil there have been advances in telehealth, from the use in PHC to other levels of care, and it is understood as a national policy decision, with legislation that guides it27, and is fundamental to connect professionals separated by geographical distances, reducing professional isolation39 and, integrated to the regulation, telehealth offers services focused on the main difficulties of access to specialties and specialized procedures and the repressed demands, supporting the implementation of regulation protocols and clinical guidelines through technical and management discussion9.

The telehealth nuclei must articulate with other different institutions, management spheres and deliberative organs10,27 to seek work in networks – ordered and coordinated by PHC at different levels of care, and promote sharing and complementation of knowledge and co-responsibility for health care47,48. This design is complex and its analysis can be favored by comprehensive evaluation models that seek to understand the process and the

qualification of telehealth49 and to consider telehealth as an innovation at service of the network in which it is inserted, being adaptable to the different needs and specificities of the actors and context involved34.

Specific aspects, related to the implementation of a telehealth program50 or to the political conception of telehealth51, have already been contemplated in more focused evaluation models. However, by corroborating the proposal developed in this study, we found in the model proposed by Chang52 a logical framework that took into account barriers - behavioral, organizational, technical, economic and legal, and the development of the steps in search of results. This proposal also sought an analytical and comprehensive process for assessing telehealth considering its complexity, but its design provides service providers and patients as users, which is not the case in the Brazilian scenario.

Other models of evaluation of telehealth, which consider its complexity and the Brazilian context, were not identified in the literature. Therefore, we consider useful and timely a model from TC, which presents an analysis to guide changes in the context of PHC in the SUS, and which considers the role of actors and organizations from different management spheres and guides the scope of the desired changes53. The involvement of all those who act in the process, and whose behaviors are decisive for the implementation and results of the intervention, is essential to expand the transformation potential that is sought with the evaluation to strengthen the use of telehealth for care support in PHC

5 FINAL CONSIDERATIONS

Innovative models of care to respond to the needs of health systems and to maintain or improve their quality are increasingly being serviced by service providers, managers, professionals and users. Telehealth is one of these models and seeks to improve access and quality of health care through support to professionals for the transformation of the health care model, reach the proposal for comprehensiveness and health surveillance, optimization of resources and reduction of costs to health systems.

The proposed evaluative model seeks to contemplate the complexity of the processes that involve the use of telehealth for care support in the context of PHC, involving key actors to identify the actions necessary for the change process. The model was applied in the context of the Brazilian National Telehealth Network Program54. The aim is to develop an evaluation that allows understanding how and why the intervention is working, or not,

comparing the results found with the program theory so that a critical analysis of the process as a whole can be established and think of new and richer trajectories.

Thus, it will be possible to facilitate the construction of an evaluation process of the use of telehealth for care support in PHC in a systematic and deep way that identifies weaknesses and potentialities related to their use by professionals in the work context. Such knowledge may contribute to the strengthening of telehealth as a social technology, capable of transforming realities in search of answers to real health needs and access to health as a right of citizenship.

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