Family Health Support Center: reflection on its development through realist evaluation

Núcleo de Apoio à Saúde da Família: reflexão do seu desenvolvimento através da avaliação realista

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ABSTRACT This study aims to assess the development of a Family Health Support Center (Nasf) team in the city of Recife, Pernambuco, Brazil. This is a qualitative study based on realist evaluation. Identification and analysis of the contexts, mechanisms and results were carried out by an Nasf team. The research was initiated by the formulation of the initial theory of intervention based on documentary research and workshops with program informants. Next, focus groups were formed with professionals from a Family Health Team (FHT) receiving support and users from the area, as well as semi-structured interviews with program managers at district and municipal level. Thirteen contexts, seven mechanisms and four results were identified, which together produced six Context-Mechanism-Outcomes (CMOs). Evaluation of the Nasf team revealed a dual profile that combines technical-pedagogical features with clinical ones relating to care. This duality produces results that, together, generate higher resolution Primary Care (PC). On some occasions, however, an outpatient-centered approach can be seen to emerge in its work with PC and the users in the locality. Identification of elements and the interactions among them is fundamental for ensuring sustainability and replication of this intervention throughout Brazil.

KEYWORDS Health evaluation. Health care evaluation mechanisms. Primary Health Care.

RESUMO *O estudo objetiva avaliar o desenvolvimento de uma equipe do Núcleo de Apoio à Saúde da Família (Nasf) da cidade do Recife (PE). Trata-se de um estudo avaliativo, com enfoque qualitativo, com base na avaliação realista. Foram realizadas a identificação e a análise dos contextos, mecanismos e resultados produzidos por uma equipe do Nasf. A pesquisa se iniciou com a formulação da teoria inicial da intervenção, a partir de pesquisa documental e oficinas com informantes do programa. Em seguida, foram realizados grupos focais, com os profissionais de uma equipe de Saúde da Família apoiada e de usuários do território, assim como entrevistas semiestruturadas com os gestores do programa, nos níveis distrital e municipal. Foram identificados treze contextos, sete mecanismos e quatro resultados que, juntos, interagem produzindo seis Contextos-Mecanismos-Padrão de Resultado. A equipe Nasf avaliada produz um perfil dual que compartilha o aspecto técnico-pedagógico em concomitância com o aspecto clínico-assistencial. Essa dualidade produz resultados que, em conjunto, significam uma maior resolutividade da Atenção Básica (AB). Entretanto, observa-se, em determinados momentos, a produção de uma lógica ambulatorial em sua atuação junto à AB e aos usuários no território. A identificação dos elementos e suas interações são fundamentais para a sustentabilidade e a disseminação dessa intervenção no contexto brasileiro.*

PALAVRAS-CHAVE *Avaliação em saúde. Mecanismos de avaliação da assistência à saúde. Atenção Primária à Saúde.*

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Introduction

Primary Health Care (PHC), called Primary Care (PC) in Brazil, is a strategic element in the organization of the Unified Health System (SUS). It includes actions aiming to promote health, prevent injuries, risks and diseases, diagnose and treat diseases and provide patient rehabilitation[1]. The Family Health Strategy (FHS) was devised to consolidate the process of municipalization of PHC and to coordinate integral health care with the Family Health Teams (FHTs) in the registered area[2].

In view of the healthcare demands and needs present in the area and the obstacles and challenges encountered during implementation of FHTs, in 2008, Family Health Support Centers (Nasfs) were created to expand the scope of care for users and provide higher-resolution PC[3].

In 2017, following are view of the PNAB[4] (National Primary Care Policy), Nasfs were renamed Extended Family Health and Primary Care Units (Nasf-PCs) and these should act in an integrated manner to provide clinical, medical and pedagogical support for PHC professionals. In this study, the term Nasf will be used, as this makes it clear that proposed actions must be based on the work methodology of matrix support, expansion of the clinic, co-responsibility, integrated care management and integral PC[5].

The proposed Nasfs and their implementation have given rise to a variety of configurations, misunderstandings and distortions regarding PC[6]. While the Nasf is still relevant, the population's health needs have been shown to be more complex and related to local contexts and living conditions, requiring interdisciplinary and multiprofessional care[1].

The Nasfs thus constitute a complex intervention/program, understood as the interaction of multiple components with various dimensions of complexity, including the difficulty of implementation and its numerous levels of organization[7].

Complex interventions share numerous characteristics. They possess a series of components that can act independently or interdependently and there are factors and active ingredients that are not easy to define. Such intervention scan be delivered at the individual, organizational or population level and may reach users, directly or indirectly, through health professionals or health systems[8,9].They do not follow pre-established patterns, as their form varies from one context to another[10].

The process of developing an intervention is one step in the explanatory model designed to shed light on the life cycle of interventions[11,12]. The life cycle perspective takes account of the fact that new health programs proceed by way of a series of overlapping stages: implementation, development, evaluation, maintenance/interruption and, sometimes, dissemination to other places or beneficiaries[13-15].

Understanding the development of an intervention is essential for its replication and support. Identification of contextual factors and mechanisms enables reflection regarding the challenges and opportunities the intervention faces, making it possible to carry out more extensive planning of actions focused on sustainability[16].

In complex and comprehensive interventions, where the boundaries between the context and the intervention are not clearly defined, such as the Nasfs, evaluation studies that aim to understand the development of interventions can use an array of different forms of assessment, including those based on theory[1].

Understanding the need to express how complex interventions evolve in context and acquire continuity, the present study aims to assess the development of one Nasf team in the Brazilian city of Recife and there by identify the contextual elements, mechanisms and results generated by the Nasf program. It is known that these are factors that can boost or hinder the sustainability of the program, depending on the context within Brazil and the profile regarding technical-pedagogical features and clinical care.

Methodological procedures

This is a qualitative evaluation study of the process of development of an Nasf team, based on the Context-Mechanism-Outcome (CMO) triad of realist evaluation,[17] conducted in the city of Recife, Brazil. Realist evaluation is an evaluation based on theory and critical realist epistemology. It is guided by theoretical-conceptual models and uses these to derive cumulative and transferable lessons from the process of evolution of interventions.

Better understanding of the relationships established by the CMO triad, which influences the development and implementation of an Nasf, requires the different viewpoints of the interested parties to be borne in mind and for these parties to be encourage to play an active part in the evaluation process. Pawson and Tilley[18] state that a realist evaluation achieves its research objectives by including various kinds of participant.

Following the recommendations outlined in the literature on realist evaluation, the present study was carried out in four stages: (1) development of the initial theory of the Nasf team; (2) data production; (3) data analysis and validation; and (4) refinement of the Nasf team theory[17,18].

First stage: development of the initial Nasf team theory

The study started out with formalization of the initial theory of the Nasf team by way of documentary research and workshops with individuals linked to the Nasf program. These are called informants.

Since the creation of the program, Nasf ordinances and decrees have been used, along with the logical[19] and theoretical model of Nasf[20], to identify contextual elements and underlying mechanisms that explain the results of the program. After reading the documents, an initial pre-theory of the Nasf team was drawn up.

The initial pre-theory was presented to the informants in two workshops the informants provided input and changed the elements present in the pre-theory in order to build up the initial theory of the Nasf team. Workshop participants included: a manager from the State Health Department linked to the Nasf in Pernambuco, Brazil; a manager from the area surrounding the city of Recife who coordinates the Nasf program; and an Nasf worker from the area surrounding the city of Recife who has been on the program for over one year.

At the end of the two workshops, the initial theory of the Nasf team was drawn up and its contextual elements, mechanisms and results established. The scripts for the focus groups and the semi-structured interviews for the next stage of the research were based on elements that appeared in the initial theory.

Second stage: data production

The data production process validated and improved the information on elements relating to the context, mechanisms and results described in the initial theory. The measurement of these Nasf elements was carried out with users covered by the FHT, with the support of the study's Nasf team, FHT workers, the Nasf team and district and municipal managers, through focus groups and semi-structured interviews.

Three focus groups were conducted: one with Nasf workers to identify the various elements of the context and mechanisms that support the results found; another with FHT workers; and a third with FHT users. The purpose of both of the last two focus groups was to identify the results produced by the Nasf for users and professionals connected with the FHT in question, as well as elements of the context.

Focus groups can be understood as a qualitative research technique involving group interviews which collects information through group interactions[21]. The

choice of using focus groups as the main data collection strategy was based on the belief that perceptions, attitudes and opinions and their expression are more easily identified during a process of interaction. In focus groups, the comments of some subjects may encourage others to express their opinion. In addition, focus groups reveal not only 'what' subjects think, but also the reasons 'why' they think that way[22].

The focus groups were coordinated by the researchers, who acted as moderators of the discussion, in an attempt to make it possible for all participants to express their opinions, especially those regarding the proposed theme and the debates surrounding the most salient issues. To guarantee the reliability of data collection, the discussions were audio-recorded and transcribed, with the full knowledge and authorization of the participants who signed the Term of Free Informed Consent.

Nasf district and municipal managers were interviewed by way of a semi-structured questionnaire, with the purpose of collecting information to complement the elements of the context and mechanisms identified with the workers of the Nasf team under study.

Third stage: data analysis and validation

The third stage of the research consisted of analyzing the data collected to identify and highlight the regularities and relationships between elements of the context, mechanisms and results and the development of CMO chains. Data analysis was performed in an interactive and non-linear fashion.

The categories used for data analysis were based on a realist evaluation guided by theoretical-conceptual models inspired by the CMO. *Chart 1*, below, provides a systematic overview of the four analytical categories used.

Chart 1. Analytical categories, their definition and operationalization

Category	Definition	Operationalization
Context	Real conditions in which programs are introduced for the operation of the mechanisms.	Social, environmental, economic and biological conditions of the territory, users and workers of Nasf and FHT in which the Nasf program is implemented.
Mechanism	Ways in which the components or any set of them bring about changes resulting from the program. The logic of a program intervention, the ways in which the resources offered permeate the change.	Logic of one or the whole set of Nasf interventions/actions with the objective of bringing about behavioral change in the territory covered by the USF and the eSF professionals.
Result	Intended and unintended consequences of programs resulting from the activation of different mechanisms in different contexts.	Consequences and effects found to be caused by the Nasf implantation process in the referenced eSF team and users in the territory.
Context-Mechanism-Outcome (CMO)	Models that indicate the relationship between the different contexts associated with the program mechanisms that bring about changes in behavioral or behavioral regularities as a result of the program.	Chains of the interrelation of the contexts presented, the mechanisms chosen by the implementing agents and the results found for the Nasf program at the USF and in the territory covered.

Source: Adapted from Pawson and Tilley[17].

Data analysis was performed using content analysis to enable identification of recurrent themes. Bardin[23] defines content analysis as a set of communication analysis techniques in which systematic and objective procedures are used to describe the content of messages.

The focus group sessions were recorded and transcribed by the researchers involved. Data were interpreted by way of analysis of written transcriptions, debates and individual statements from the focus groups, the interviews, and any notes taken.

Fourth stage: refinement of the theory of the Nasf team

The fourth and final stage consisted of refining the initial theory of the Nasf team, complementing the changes found by this research with elements of the context, mechanisms, results and CMOs that had not previously been included and removing those that were not found during the research.

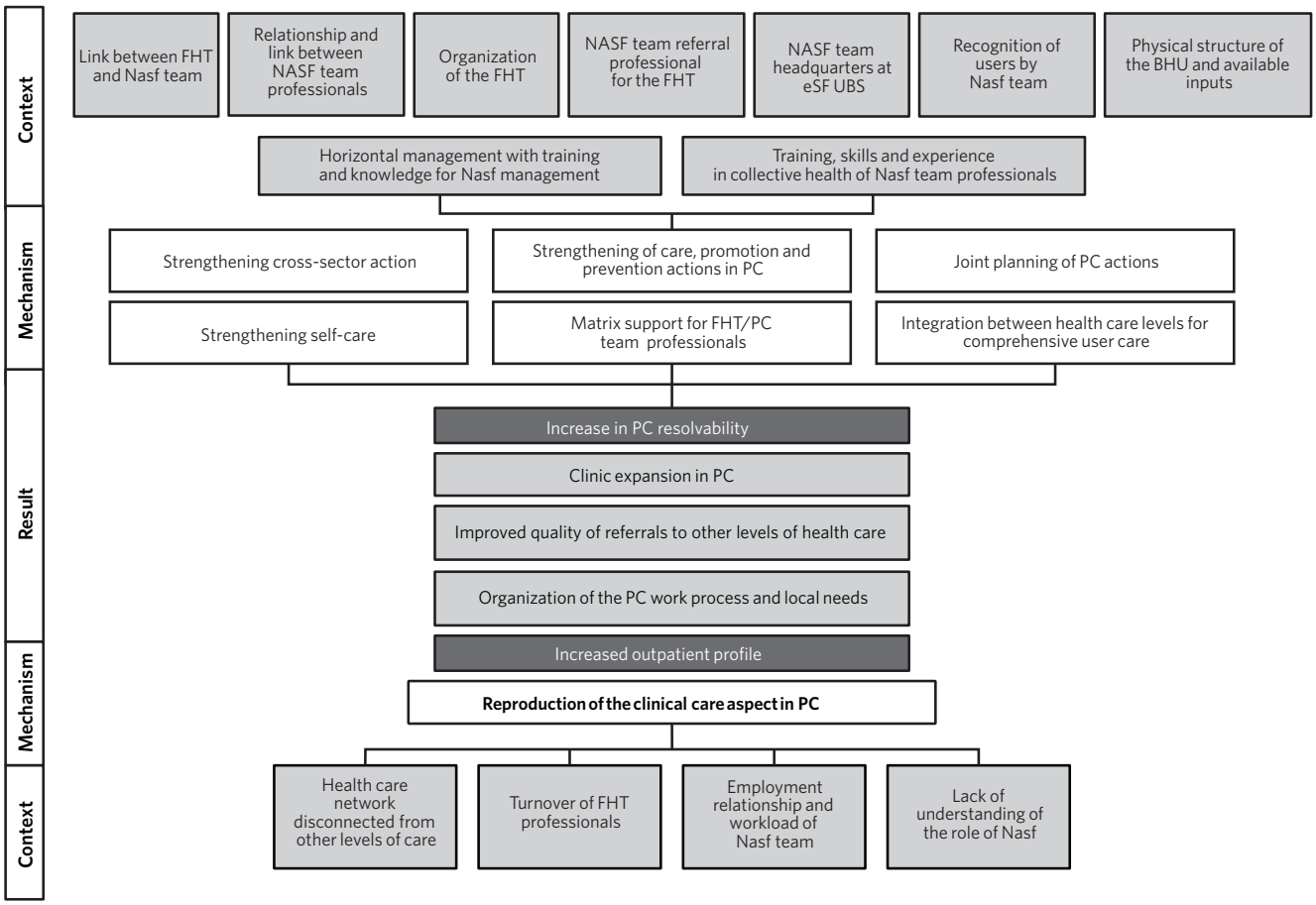
All ethical requirements were met and compliance with Resolution No. 466/12 and complementary resolutions was ensured. The study, which formed part of the broader research project, 'Evaluation of Primary Health Care Interventions in the State of Pernambuco', was approved by the ethics committee of the Aggeu Magalhães Institute (IAM/PE), in Ethics Approval Certificate (CAAE) 73416217.3.0000.5190, opinion 2.622.899. The data and materials collected were used exclusively for the purposes of this research. All study participants signed the Term of Free Informed Consent, ensuring anonymity and confidentiality.

Results

Thirteen contexts that influence the process of development of the Nasf team under study were identified, along with seven mechanisms and four results. *Figure 1* illustrates the theory of the Nasf team.

The results found represent the expected positive effects of the program since its creation, reflecting the main objective of the Nasf of achieving higher resolution PC. However, the research shows that, alongside the expected results, the team generates the negative effect of increasing the outpatient profile of PC, replicating the logic of an outpatient clinic, on some occasions, in response to specific contexts.

Figure 1. Nasf team theory



Source: Own elaboration.

Six CMOs were drawn up and these demonstrate how different contexts influence and enable activation of the seven mechanisms, producing the four results found *(chart 2)*.

Chart 2. CMO of Nasf team theory

	Context	Mechanism	Result
CMO1	Training, skills and experience in collective health of Nasf team members(C1)	Strengthening of care, promotion and prevention actions in PC(M2)	Improved qualityof referrals (R1)
	Horizontal management with training and knowledge for managing Nasf (C2)		
	Link between eSF and eNasf (C3)	Matrix support for FHT/PC team professionals (M1)	
	NASF team referral professional for the FHT(C4)	Integration between health care levels for comprehensive user care (M3)	
CMO2	Training, skills and experience in collective health of eNasf professionals (C1)	Matrix support for FHT/PC team professionals (M1)	Clinical expansion in PC (R2)
	Horizontal management with training and knowledge for managing Nasf (C2)		
	Physical structure of the Basic Health Unit (BHU) and available inputs (C5)		
	The Nasf team professional referred to the FHT (C4)		
	The Nasf headquarters at FHTBHU (C6)	Strengthening of care, promotion and prevention actions in PC (M2)	
	Relationships and links between eNasf professionals (C7)		
CMO3	Link between eSF and eNasf (C3)	Strengthening self-care among users (M4)	Clinical expansion in PC (R2)
	Training, skills and experience in collective health of eNasf professionals (C1)		
	Recognition of users by eNasf (C8)		
CMO4	Training, skills and experience in collective health of eNasf professionals (C1)	Strengthening cross-sector actions (M5)	Clinical expansion in PC (R2)
	The Nasf team professional referred to the FHT. The Nasf headquarters at FHT (C4)		
	The Nasf headquarters at FHT (C6)BHU		
	Relationships and links between Nasf team professionals (C7)	Integration of health care levels for comprehensive user care (M3)	
	Links between FHT and Nasf team(C3)		
CMO5	Physical structure of the UBS and available inputs (C5)	Strengthening of care, promotion and prevention actions in PC(M2)	Organization of the PC work process and territory needs (R3)
	Link between eSF and eNasf (C3)		
	Organization of the eSF (C9)		
	ENasf headquarters at eSF UBS (C6))	Joint planning of AB actions (M6)	
	ENasf reference professional for the eSF (C4)		
CMO6	Lack of understanding of the role of Nasf (C10)	Reproduction of the clinical-care aspect in PC (M7)	Increased out patient profile (R4)
	Employment relationship and workload of Nasf team (C11)		
	Health care network disconnected from other levels of care (C12)		
	Turnover of eSF professionals (C13)		

Source: Own elaboration.

CMO 1 – Improved quality of referrals to other levels of health care

CMO 1 shows that improved quality of referrals to other levels of health care (R1), a result found to be generated by the Nasf team in the FHT receiving support, is produced by three mechanisms: matrix support for FHT professionals (M1); strengthening of care, health promotion, and prevention (M2); and integration of levels of health care to provide a comprehensive service (M3).

The contexts covered by CMO1 are: training, skills and experience of collective health on the part of Nasf team members (C1); links between the FHT and the Nasf team (C2); horizontal management, with training and knowledge for NASF management (C3); and referral of Nasf team members to the FHT (C4). Analysis of statements made in focus groups and interviews with municipal and district coordinators identified these four elements as being necessary for the activation of the mechanisms of change.

M1, M2 and M3 can only be activated concurrently if the training of Nasf team professionals includes skills and experiences relating to teamwork and to the unique features of PC, along with horizontal program management and knowledge pertaining to full program development.

The Nasf work process and the supporting role of the FHT must, above all, involve building bonds of trust between the teams and this was enhanced by the establishment of an Nasf team referral technician for the FHT.

CMO 2 - Expansion of the PC clinic through matrix support and strengthening of actions

Expansion of the clinic (R2) is characterized by an increase in the scope of actions that the FHT performs by way of improved quality of care and of the individual and collective activities provided by the FHT itself. Analysis of this result showed that it is generated by different mechanisms, associated with specific contexts.

In CMO 2, R2 was found to be brought about by the sharing of two mechanisms, M1 and M2, and these are only activated within the NASF team by contexts C1, C2, C4, C5, C6 and C7.

Data analysis identified that the interpersonal relationships and positive bonds among Nasf team professionals constitute an important context for the production of R2, as a result of matrix support and strengthening of the actions of the FHT. The Nasf team needs to see itself as a team acting in unison and constantly establishing connections between its components, in such a way as to ensure that it can enter into dialogue with the FHT.

CMO 3 - Expanding the PC clinic by strengthening self-care

R2, as it appears in CMO 3, is produced by activation of automatic strengthening of self-care vis-à-vis users' health (M3). The Nasf program, within its field of activity, carries out activities that enhance the co-responsibility of users with regard to health and care.

The pain group and health promotion activities carried out by the Nasf team under study, for example, expands the scope of the PC clinic by encouraging self-care, including changes in diet and physical exercise.

The administrative region and users need to see members have the confidence to work and carry out educational and clinical care activities. Users may not fully understand the role the program and the Nasf team play within the Family Health Unit (FHU), but they do recognize that these professionals are part of the team and demonstrate confidence in their practices.

CMO 4 - Expansion of the clinic in terms of PC by strengthening cross-sector actions and health services

CMO 4 also results in the expansion of the clinic in terms of PC, thereby explaining how R2 is produced by the Nasf team under

evaluation. This CMO can be seen to include M3 mechanisms and the strengthening of cross-sector action (M5), both of which are mechanisms that relate to the FHT extramural activities.

Even though the health care network is disjointed and Nasf team professionals need to create their own network of contacts to guide users in relation to cases arising in the area (C10), the Nasf team under evaluation on occasions works in concert with a variety of public and private sector institutions and strives to enter into dialogue with the SUS health care network.

CMO 5 - Organization of the PC work process and the needs of the local area

CMO 5 show the organization of the PC work process is achieved and how the needs of the local area are met (R3) by the Nasf team investigated in this study. The process occurs through activation of M2 mechanisms and joint planning of PC actions (M6). The Nasf team plans and strengthens the actions that will be carried out with the FHT based on the demands presented in monthly meetings.

At the same time, different from the other CMOs, an increase in the outpatient profile of PC (R4), produced by the reproduction of the clinical care aspect in PC, was identified (M7).

CMO 6 - Increased outpatient profile of PC

During development of the methodology of the present evaluation, elements conducive to the production of the expected results outlined in the Nasf program regulations were found. However, within the evaluation process itself, it was found that there are contextual factors that predispose the Nasf team to bring about M7, related to the primacy of clinical care at given points in comparison to the content relating to education and the matrix.

Although the Nasf team produces results R1, R2 and R3, which have the effect of increasing the resolution of PC, it also often has the opposite effect of reproducing and reinforcing an outpatient profile marked by individual consultations. The lack of an interconnected health care network (C9) was identified, which, together with a lack of understanding on the part of the FHT and users of the role of the Nasf program, generates M7, which, in turn, generates the unexpected result.

Discussion

An assessment of the development of an Nasf team in the city of Recife, Pernambuco, Brazil using a realist evaluation was the intended result of this study. Identification of elements of the context, mechanisms, results and the relationship between these and the construction of the CMO helps to promote discussion of these elements and of their influence on the continuity, profile and results of this PC intervention.

Analysis of the theory of the Nasf team shows that a team that prioritizes increasing the resolution of PC, but, at the same time, reinforces a profile of clinical care often ends up providing outpatient care of a fragmented nature. This raises questions regarding Nasf implementation and development in various contexts. These have, since the creation of the program, been absent from statements of policy and expected results at various levels.

The improved quality of referrals, a result produced by this intervention, suggests a connection between the Nasf and other levels of health care occurring as a result of activation of matrix support for FHT professionals, strengthening of actions, and integration of different levels of health care.

Andrade et al.[24] argue that understanding of the actions of the Nasf is essential if it is to improve and reduce the number of referrals to specialized care. However, it is important to focus reflection on how this

improvement is produced. The Nasf and its implementation process must propose the redirection of primary health care practices and further training in this field, using tools such as matrix support, strengthening and planning of actions and integration of levels[5].

The lack of specialized services can cause the Nasf to function incorrectly, generating proposals for outpatient care[25] and producing an Nasf that acts as a substitute for insufficient specialized healthcare services. This is in line with the findings of this study for CMO 6.

Analysis of CMO 6 reveals that the contexts that trigger M7 and the production of R4 are linked to a) the lack of a health care network; b) a break in the link caused by high turnover of FHT professionals; and c) the variety of different links and Nasf team workloads. There is also a lack of understanding of the role of the Nasf for the FHT and the administrative area. This is a constant theme in the findings of Souza and Medina[26], whore lack of articulation of the various FHT, SUS and Nasf players and the potential this possesses to generate negative program results.

Discussing the work and process of development of Nasf teams, Santos et al.[27] argue that we should bear in mind factors that hinder actions of a technical-pedagogical nature, such as the high demand for care, the training and experience of professionals, the needs of the population and local management, and the specialized service network, which cannot meet the existing demand, generating a constant overload at all levels of care, including PC and the Nasf.

Lack of availability and poor functioning of specialized care is a structural problem in the SUS and has a deleterious effect on Nasf performance. This scarcity of specialized services leads to misuse of the Nasf team as a substitute for such services[28].

The Nasf team will often be seen as a way to make up for the failings of the health network and the absence of specialized service centers, taking advantage of an available resource that was not envisaged to serve this function[25]. The heterogeneous and inadequate specialized care network creates a bottleneck in the SUS[29,30]. In many regions of the country, there is an insufficient supply of services and a shortage of professionals, as well as a dependence on the private sector, which causes the system to fragment[29].

Tesser and Poli-Neto[30] discuss the need to build clear organizational operational guidelines for the specialized network, as occurred with the FHS, and to develop and install an organizational framework for specialized care services based on the Nasf experience.

The development and implantation of the Nasf are fundamental components of its functioning and sustainability within the FHS. Matrix support is one of the main mechanisms that generates the positive results of the Nasf team under evaluation here, along with improved quality of referrals (CMO 1) and the expansion of the PC clinic (CMO 2).

Cunha and Campos[25] argue that matrix support is the theoretical and methodological framework for guiding the work of the Nasf, which aims to ensure specialized backing for the FHT in a personalized and interactive manner. Cunha[31] notes that the intention of matrix support is to provide an expanded clinic, an effective tool for expanding the scope of FHT work.

Hirdes[32] considers integration of the Nasf team and the FHT to be a prerequisite for matrix support and thus examines the principles that support this: interconnectivity, integrated care, interprofessionality, accessibility and resolvability. This concurs with the findings of this research, which describe contexts C2, C4 and C6 as elements that favor the activation of M1 for the expansion of the clinic.

The innovative and important role that matrix support plays insustainability and

in the development of the Nasf has been shown. Brazil and the SUS are making advances in terms of the expansion of services and the connections between them and among matrix stakeholders, in the coordination and integrated care for the individual. Some contexts, however, hinder its full activation, at micropolitical (C10-C13) or macropolitical level, as is the case with the revision and management of the new PNAB[4].

The re-publication of the PNAB, in 2017, was the result of criticisms and questions raised by SUS and public health stakeholders. Souza and Medina[26] note that the new PNAB removes the term 'matrix support' from its nomenclature, casting out on the role of education and matrix support in the Nasf. Analysis of the findings of the present study indicate that the Nasf team already possesses some of both aspects and that this often detracts from matrix support and causes it to take on the role of an outpatient clinic.

Brocardo et al.[33] note that the current PNAB describes care as being the Nasf's core activity, but the authors say that it is still too early to draw firm conclusions, as the program is yet to be operationalized.

However, the findings of this research suggest routes forward that the development of the program may take. There are ordinances and regulations that explicitly establish matrix support as a central plank of the program, such as the renaming of the Family Health Support Center as the Extended Family Health and Primary Care Center. Even so, the Nasf team finds it difficult to arrange comprehensive care.

By removing such Nasf program guidelines from the PNAB, the Ministry of Health encourages municipalities and teams to produce an increasingly fragmented, outpatient-oriented and purely clinical Nasf. The policy position of the program managers, in the municipality under study here, is to maintain the old nomenclature and retain direct matrix support as the core of the program. This suggests that CMO 2 will continue to be active but that the national political context also favors CMO 6.

Another element that influences the development and sustainability of the Nasf team assessed here is user recognition of the program. This activates the mechanism for strengthening self-care and expansion of the clinic. Aciole and Oliveira[34] and Souza et al.[35] state that there is recognition of the activities carried out by the Nasf team, even when they are not associated with the proposal by name. Users demonstrate recognition of the Nasf's professional categories as a result of participation in the activities developed by these professionals[36].

The sustainability of the Nasf program is directly related to the positive results produced and the recognition that stakeholders have of it. Understanding the role of the Nasf and its potential for expanding clinical care and (re)directing the FHS itself is essential for its continuity and continued funding. Hence the need to create strategies that promote and expand understanding of the Nasf team in the locality and among SUS professionals.

Expansion of the clinic (R2) has also been produced by strengthening cross-sector actions and health services (CMO 4). Through M5 and M6, the Nasf has created interconnections and streng the new cross-sector actions and other health services, thereby expanding the scope of care provision and the extension of the clinic to all users covered by PC.

The production of care and its integration with in PC must be founded on communication between the various teams, inside and outside the sector, creating a network of care and protection for the user. The interconnectivity of services, structured through dialogue and the bonds between the various professionals, actions

and projects, creates a network of interdependence and co-responsibility in the team as a way of ensuring provision of a comprehensive service[37].

The Nasf team evaluated in this study has forums for discussion with the FHT and this affects the planning and strengthening of PC actions. Likewise, links with programs such as the Health Academy and the Disabled Children's Association (AACD) and with Non-Government Organizations (NGOs) working in the region ensure continuous dialogue and planning regarding the expansion of the clinic and comprehensive care.

However, the present study demonstrates that the lack of a network linking the various levels of health care, and the paucity of institutional dialogue between the health sector and the other sectors, both weakens and hinders interconnectivity. Such links depend on the relationships and interpersonal contacts of Nasf team members. Corroborating this finding, Machado, Colomé & Beck[38] arguethat the daily routine of health services, along with the success and agility of referrals, depends, for the most part, on interpersonal relationships and informality, much more than on systematized pre-established connections between levels of complexity, in which formal access routes often do not work properly.

There is therefore an urgent need to implement management techniques that promote joint actions and goals and the strategic division of functions among professionals from different teams[39].

Finally, it should be noted that the Nasf program is intrinsically linked to the organization, management and planning of the FHT and of PC as a whole. Related working processes need to be linked to those of PC and of the SUS itself. These links range from the relationships between professionals in the FHU to the management of programs and the connections between them, which are appropriate for the cross-cutting nature of the health-disease-care process and its complexity. These demand responses that involve increasingly integrated interprofessional policies and programs, guided by dialogue and horizontal construction.

Final considerations

The Nasf team evaluated here exhibits a profile that combines technical-pedagogical aspects with ones related to clinical-care. This produces results that, taken together, provide higher-resolution PC, but, on the other hand, reproduce the outpatient logic. Reproduction of clinical care in isolation is an aspect of the Nasf team that was, to some extent, included in the formulation of the program, but with no planning of operationalization or the real impact on the development of the Nasf team in the locality.

Clinical care needs to be conducted with aspects relating to education and the matrix borne in mind. Otherwise, this mechanism merely replicates the outpatient clinic, turning the Nasf into a substitute for specialized clinical PC services. The Nasf has great potential for forging connections and redirecting the FHT and the area it serves, strengthening and planning actions, as well as integrating the FHS into the various health services and social facilities. However, certain contexts hamper achievement of its full potential and expose its short comings regarding sustainability and the production of results.

The present study has a number of limitations. As it is a case study, it represents a snapshot of the Nasf program in the local reality of the Nasf team assessed and of an FHT receiving support. However, this research has produced important information and analysis that can be used to help move the Nasf development process forward and to provide greater understanding of its functioning and sustainability.

Collaborators

Silva JWSB (0000-0002-5640-8481)* and Oliveira SRA (0000-0002-6349-2917)* contributed to the conception, planning, analysis and interpretation of data; a critical review of the content; and approval of the final version of the manuscript. Silva JC (0000-0002-1210-9121)* contributed to the critical review of the content and approval of the final version. ■

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