

## Influence of the structure component on the quality of Primary Health Care in the Federal District

### *Influência do componente estrutura na qualidade da Atenção Primária à Saúde do Distrito Federal*

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**ABSTRACT** The aim of this descriptive qualitative study was to analyze the influence of the structure component of health services on the quality of Primary Health Care (PHC) in the Federal District in the perception of local managers, within the scope of the Primary Care Qualification Program. The data was produced in Focus Groups with 77 managers of Basic Health Units (UBS) in 2020. The content was analyzed using the Idea Association Map and coded in the ATLAS.ti® software in the light of the Thematic Content Analysis. The inadequate number of professionals in the teams, especially community health agents, the non-standardization of work processes, the non-definition of coverage areas, the lack of equipment maintenance, information systems that do not communicate, the absence of vehicles and the precarious structure of some UBS were the main findings that represent structural requirements that influence the quality of PHC. The contribution of this study to guide strategies for improve the structure of services is highlighted, an essential step for the provision of safer and quality care in PHC in the Federal District.

**KEYWORDS** Primary Health Care. National health strategies. Total quality management. Quality of health care. Structure of services.

**RESUMO** O objetivo deste estudo qualitativo descritivo foi analisar a influência do componente estrutura dos serviços de saúde na qualidade da Atenção Primária à Saúde (APS) no Distrito Federal (DF) na percepção de gestores locais, no âmbito do Programa de Qualificação da Atenção Primária. Os dados foram produzidos em Grupos Focais com 77 gestores de Unidades Básicas de Saúde (UBS) em 2020. O conteúdo foi analisado por meio do Mapa de Associação de Ideias e codificados no software ATLAS.ti® à luz da Análise de Conteúdo Temática. A quantidade inadequada de profissionais nas equipes, em especial de agentes comunitários de saúde, a não padronização dos processos de trabalho, a não definição das áreas de cobertura, o déficit de manutenção de equipamentos, sistemas de informação que não se comunicam, a ausência de veículos e a estrutura precária de algumas UBS foram os principais achados que representam requisitos de estrutura que influenciam na qualidade da APS. Destaca-se a contribuição deste estudo para orientar estratégias de melhoria na estrutura dos serviços, requisito essencial para a prestação de cuidados mais seguros e de qualidade na APS do DF.

**PALAVRAS-CHAVE** Atenção Primária à Saúde. Estratégias de saúde nacionais. Gestão da qualidade total. Qualidade da assistência à saúde. Estrutura dos serviços.

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## Introduction

The Primary Health Care (PHC) consolidation in Brazil has added to the development of the Unified Health System (SUS) as it grounds the organization of the care network<sup>1</sup>. Investments have been made in the broadening of teams, especially in the Family Health Strategy (FHS), aiming at inducing improvements in the forms of care delivering<sup>2</sup>. However, gaps in quality occurs during the professional daily work, being their definition still a complex and essential task for PHC evaluation of policies and interventions<sup>3</sup>.

Quality is related to structural and organizational processes that determine the fulfillment of PHC aspects, essential for quality ensuring. Evaluation approaches and models have been developed to generate concepts and instruments to characterize the quality of services<sup>1,4-7</sup>. In 2019, the PHC Qualification Program (Qualis-APS) was implemented in the Federal District (DF) to qualify local health management and services by means of the development and implementation of a participatory evaluation system in co-construction among managers, care workers, researchers, and users. The initiative articulates actions for the evaluation, training and certification of teams, and results from the cooperation of the State Department of Health of the Federal District (SES-DF) with the Oswaldo Cruz Foundation (Fiocruz Brasília) and the University of Brasilia (UnB)<sup>8</sup>.

Qualis-APS emerged after PHC creation in DF, making ESF a unique model at that level of care<sup>9</sup>. The Program is an opportunity to face the challenges related to the organization of work, the overload and absenteeism of professionals, the need to qualify care and management, and to consolidate FHS in DF<sup>8</sup>.

The structure component is one of Qualis-APS evaluation axes, and relates to the physical, technical and organizational aspects considered essential for the quality of health services. Investments in structure have been significant in recent decades, particularly due to the Infrastructure and Requalification Program for Basic Health Units (Requalifica UBS), although

problems remain, such as the inadequacy of physical structure of units, shortage of professionals, lack or deficiency of equipment and materials, what can negatively influence PHC quality<sup>10</sup>.

So, management in health sector has been recognized also as essential as one of the most significant macro problems for the effectiveness of public health policies, requiring high responsibility from managers. Managing the deficit of human resources, supplies, infrastructure, equipment and the difficulties in providing access to services is a challenging issue<sup>11</sup>. However, it is an important component for managers to guide their actions, improving the effectiveness of their interventions in a way to provide the activity restructuring, and the creation of methods of work organization or policies for quality improvement<sup>10</sup>.

Thus, this article aims to analyze the influence of the structure component on PHC quality in DF as for the perception of local health managers.

## Material and methods

This is a descriptive, qualitative study, carried out in DF within the scope of Qualis-APS Program. The DF operates 176 Basic Health Units (UBS) distributed among seven Health Regions. PHC is composed of 615 Family Health (eSF) teams, 322 Oral Health (eSB) teams and 57 teams from the Expanded Family Health and Primary Care Center (Nasf-AB). At the local management, the Primary Care Service Management (GSAP) is composed of a manager and a supervisor, who are the local managers, and administrative technicians, who are responsible for UBS management.

This study is an excerpt from a macro-research<sup>8</sup> that sought to know what would characterize a PHC quality service in DF by means of seven Focus Groups (GF)<sup>12</sup>, carried out with local managers. This manuscript explored the interdependence between quality and structure of services as to the respondent experience.

The seven GFs, one from each DF Health Region, were carried out between January and February 2020, when 77 managers participated, as shown in *table 1*. The groups took place outside the workplace, lasted an average of two hours and were coordinated by pairs

of researchers. The debate was guided by the following questions: ‘what should a quality PHC service be like?’ and ‘what should be the quality delivered within the care provided to the user, the management work, and the teamwork?’.

Table 1. Number of focus group participants as per number of local managers and supervisors and health region of the Federal District

Health Region	Number of Managers and Supervisors per Region	Number of local managers participating in the study
1	24	7
2	22	12
3	16	8
4	18	12
5	42	14
6	46	12
7	32	12
<b>Total</b>	<b>200</b>	<b>77</b>

Source: Prepared by the authors.

The GFs’ stories were recorded, and the content was transcribed in full upon the respondent authorization given through the Free and Informed Consent Form (TLCE). The Idea Association Map (*box 1*) was used for the analysis. It is a table that organizes the discursive material into thematic columns, contributing to guide the process of interpretation and analysis<sup>13</sup>. Data from the macro-research were systematized into structure, process and

results (user care) – components of quality assessment<sup>14</sup> –, followed by the linkage to the analytical units of management and team (eSF and eSB). The results were encoded by means of ATLAS.ti® software as of the thematic content analysis. Each GF was named by the region in which local managers work, and the quotes are identified by the region number, ensuring the respondent confidentiality<sup>8</sup>.

Box 1. Idea association map for encoding

Quote	Encoding			
	Primary Code	Secondary Code	Group	Category
<i>Stories of the workshop participants</i>	Quality Standard	Quality Standard - code of interpretation	Assertions	Assertions divided into Dimensions and Sub-Dimensions of Quality Assessment
The demand is great, lack of medical professionals, lack of nurses...	Management/ Structure	Management/ Structure - Number of Professionals	Management keeps SB and SF team in a number appropriate to the needs of the territory	Dimension: Work Management Subdimension: Workforce
I think the priority in DF would be for us to have a structured team, to complete the teams.				
An offer of quality service, clearly it is necessary to have the physician, the nurse, the ACS, everything in adequate quantity. But I dream one day we will get there...				

Source: Focus Group reports.

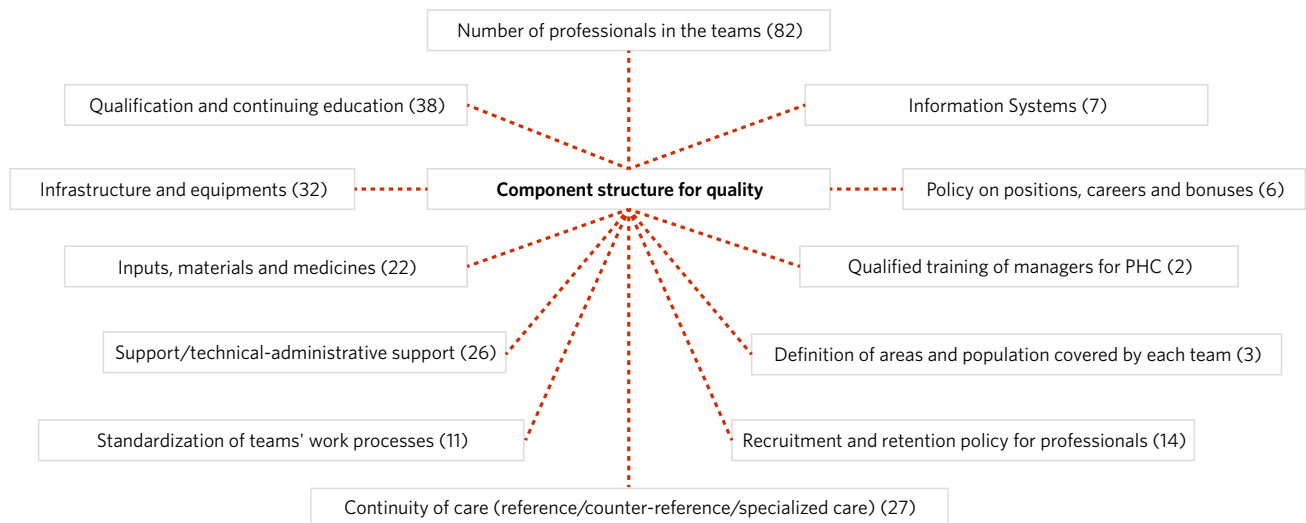
For this study, stories indicating an interdependence between quality and structure of the services were identified in GF records, and the excerpts revealing aspects of the structure that influence the continuous improvement of quality were selected. As for a better picture of these aspects magnitude, the thematic analysis is exhibited in the results, indicating the absolute frequency in which themes were mentioned by GFs. These themes generated three analytical categories<sup>15</sup>. The study was approved by the Research Ethics Committee of the Faculty of Health Sciences

of the University of Brasilia (UnB), opinion No. 5.396.127 (CAAE 29640120.6.0000.0030).

## Results

Local managers acknowledged twelve requirements related to the structure as a component of health services that influence PHC quality. The *figure 1* depicts the results generated and the number of quotes each requirement received.

Figure 1. Requirements related to the component structure that influence PHC quality



Source: Prepared by the authors.

The twelve requirements, grouped as for the thematic proximity, resulted in three macro categories: work management; structure for the organization of care; and physical structure of UBS units.

## Work management

This category assembles requirements related to the number of professionals and to the policies concerning positions, careers, bonuses, recruitment and retention of professionals in PHC. It brings aspects on the qualification of professionals and the need for Permanent Health Education (EPS).

An adequate number of professionals assigned to eSF and eSB, and, especially, of Community Health Agents (ACS), is essential to offer quality services, as evidenced by the magnitude of quotes during the GF (82 quotes).

*First of all, to offer a quality service, I think we don't have a complete human resourcing framework. From the moment this is seen and this is resolved, we will start to manage quality. (GF Health Region 1).*

*PHC Quality is not achieved without community agents. I overload the community agent, because he is not able to do his job. So, the technician is overloaded, who overloads the nurse, who overloads the physician, that is left over the manager. (GF Health Region 6).*

*I run a UBS with ten teams that work various territories. I run rural teams responsible for approximately 10 thousand inhabitants, but have been lacked a physician for a year now. (GF Health Region 4).*

The inadequate number of professionals causes many to absorb excessive administrative work, especially due to the deficit or complete absence of a worker who performs this task for the UBS, or due to the decrease in the number of managers, forcing overload (support/administrative technical support: 26 quotes).

*Today, I don't have support, I don't have an administrative technician, there is no person who can help. So, there is that too, there is lack of HR for administrative work, and, even if we complain, nothing happens. (GF Health Region 6).*

*Within these teams, workers are applied to diverse functions, ACS does the administrative work, because there is no HR. (GF Health Region 2).*

*In the past, there were three people in management; nowadays, there are only two; it's absurd, because we become extremely overloaded. I begin working at 6h50 am; my worktime should finish at 18h00, but I always stay until 19h00. So, I am the first to arrive and the last to leave the UBS. (GF Health Region 7).*

Policies encouraging the retention of professionals are understood as structural issues for quality improvement. Those policies should include recruitment and retention of professionals with adequate profile, as well as bonuses guided not only by the UBS capacity of workers but also by the professional performance.

*Because the worker is 25 years old, he thinks he is already stuck there, he pertains to that sector, he has restrictions; then you ask to do something else - as we're talking about teamwork - [and he refuses to do it]. So, it is very important that we really reassess the workers allocated to PHC. (GF Health Region 5).*

The way in which the financial bonus for PHC professionals is offered by SES-DF, as is to local managers, makes some to remain in the same position due to the extra salary enjoyed by that position, even not fulfilling the right profile. This situation worsened with PHC policy implementation in DF in 2017, since it transformed all ESF existing care models, becoming officially called by professionals as 'Convert'.

*I applied for the Convert because I was forced to do so, otherwise I would lose my bonus. So, I think that maybe the change in the bonus workers receive for productivity was a way to improve the profile of these professionals who work in primary care, because today the bonus is by PHC capacity of workers. So, I can be assigned to a sector and stay*

*away for 120 days, five hundred thousand days, I don't know, and I will remain receiving the same bonus. (GF Health Region 3).*

Another aspect mentioned is the low appraisal of PHC in the health system, meaning that many professionals with various difficulties are transferred to work in the UBS, while, in other situations, their experience, training and trajectory are not always taken into account to assignment to a place where they can better perform their capacities.

*If you have problems in the hospital, you go to Primary Care. Do you have a restriction? You go to Primary Care. Did you have any health problem? You go to Primary Care. Do you know anyone? You go to Primary Care. So, Primary Care was a prize for a long time. (GF Health Region 3).*

*They spend a lot of money qualifying HR to stratify that human being, the one who comes with a history, a context of professional and personal trajectory [which will guide], where he will fit in that organization. And here we don't have that. We have several professionals who joined primary care for various different reasons, very different from what we would imagine it was de prospect of working as to the experience in which they were trained. (GF Health Region 3).*

Local managers' stories strongly bring the idea that having professionals carrying an adequate profile, committed to PHC, is a central aspect of service structure for health care quality.

*But what I feel most seriously is that they disbelieve the program, they disbelieve the strategy, they disbelieve that challenge. So, it is distressing to me to see a generation that is here to take it forward and, for all those circumstances reported here, discredit it. And our role is to arrive and inject encouragement, and take the proposal forward; and, many times, we feel like this: where am I going to get the strength to give strength to these people? (GF Health Region 5).*

*[...] It is the role of the manager or management to work on the professional development, and, if a professional does not fulfill the profile, we have to sit down, talk, score, agree and give him the chance; to provide training. But, if he doesn't fulfill a profile, we have to play the boss, and sometimes we don't have available time, because we have to do all the operational logistics for the office tasks to work, and it lacks time for professional development. (GF Health Region 7).*

*We find pediatricians who had been doing pediatrics for 25 years, and, after a 40-hour training [...], they say [to him] 'from now on you will assist in every case, you are a family and community physician', but without training... you took a mini-training. (GF Health Region 1).*

Qualification and PHC continuing work education were the second most mentioned requirements by local managers, with emphasis on team training for PHC care (38 quotes).

*After we were transformed into the clinic that divided each one into their teams, and to this day they [ACS] cannot understand that they are integral members of a team, that they will just make home visits, [...] that they need to remain in the care service, that they need to be trained, that many are resisting to learn how to check pressure, check the blood glucose, that it is a current PNAB work that, if the nurse receives training, he become able to do the screening. (GF Health Region 6).*

*If I have qualified professionals, updated professionals, who are taking courses, who are seeing and reviewing the ordinances, technical notes, who have the support of someone, who have a matrix, who have a permanent education, as he becomes more influential, he will perform his function much better. (GF Health Region 2).*

## Structure for the organization of care

This thematic category describes aspects referred to by local managers regarding the

need for standardization of work processes, clear definition of activity area, and population covered by each team. It also addresses the importance of reference and counter-reference to ensure the continuity of PHC care, and of information systems as well.

Local managers indicated the need to follow a unified guidance for their activities as for the best conduct of PHC work, following well-established flows.

*I believe that, to render a quality service by PHC, it is also necessary to standardize services. Because what I realize is that each unit works differently. The patient, he receives an information in one unit, but, when he arrives in another, the information is different. And I think it needs standardization, I think we should all speak the same language. (GF Health Region 1).*

*Standardization of clinical behavior, I think that is clear, keeping in mind the difficulty of each case, the peculiarity of each case, I think this is an interesting thing. (GF Health Region 7).*

The definition of areas to be covered by teams is also noted as an important structural aspect for organization of work and quality of services.

*IBGE was used as data basis, and IBGE data is totally outdated, and today we carry large units [...]; so, we have teams servicing seven thousand inhabitants, with seven thousand people in the territory, and teams servicing almost ten thousand; so, this makes it difficult for us to start offering quality services. (GF Health Region 4).*

*I will not receive another team, because I do not have an area of vulnerability in my territory. Because I have a certain territory X of greater vulnerability and then I place myself today in a unit that offers a very low coverage, that I have busy agendas, because, like this, I have already reached the limit of how to manage my agenda, we have tried everything, because we are not able to offer a service to the population. (GF Health Region 3).*

The inadequate structuring of secondary/specialized care appears in the managers' stories as obstacle to providing quality care (27 quotes). Also, the lack of interconnected information systems (7 quotes) makes it difficult for the service network to operate in a way that ensures the continuity of primary care.

*Frequently, the issue of having this quality back-up, of having this reference and counter-reference, I refer the person to a laboratory and have the answer to an exam, it was timely analyzed, so that I can follow up on my conduct. (GF Health Region 1).*

*A counter-reference service, a quality PHC service, is to have a counter-reference service where I am sent as a user to another unit, I have a counter-reference, but you don't even have the history in the medical record, because there, at the Base Hospital, it is recorded in the medical record, because my unit is offline, it is recorded in another; her attendance unit is on the other side of the street, but she has to record in another one. (GF Health Region 2).*

Information systems are understood as facilitators of the work process. However, the absence of maintenance and/or lack of connection among systems hamper the work. Three information systems and electronic medical records are used by DF health network, limiting access to data on care and follow-up of users at different levels of care. The e-SUS is the strategy applied within PHC; the MV System is used in the services managed by the Institute of Strategic Health Management of the Federal District, formed by the Base Hospital, the Santa Maria Regional Hospital and Emergency Care Units; TrakCare, on the other hand, is the system of the remaining hospitals and knots of the network.

*We are now going through great difficulties for those who use the private internet, because SES does not have the availability of internet connection necessary to cover all the Basic Health Units;*

*besides, our personnel has been paying for our connection. And when the system goes down, we lose the access to e-SUS and to medical records. (GF Health Region 4).*

*An integrated medical record and pharmacy service. Today, the user gets medicine where he wants, he attends the consultations where he wants. Because there is a place working offline e-SUS, the other uses TrakCare, the other uses MV, the other access Online, the user gets his record where he wants and he is attended where he wants; he gets the neighbor's address, we don't have an integrated pharmacy system, he gets the black box medicine at the pharmacy, at hers and his, because we simply don't have an integrated pharmaceutical and medical record service. (GF Health Region 2).*

*In addition to all this, there are still several systems that do not connect to each other, you have to access one, access the other, access one that does not speak to the other. (GF Health Region 7).*

## Physical structure of UBS

This category assembles the requirements related to the structure that concern: infrastructure of UBS, equipment, supplies, materials and medicines.

Local managers indicate the existence of problems related to the minimum infrastructure necessary for PHC work, especially the deficit or lack of equipment maintenance, inexistence of vehicles to provide home care, and UBS precarious physical structures (32 quotes).

*Four teams taking care of a territory of twelve thousand people and I don't have a printer, I don't have a sole print, I don't have a printed prescription, the allowed printed quantity is minimal and we have to make copies. (GF Health Region 6).*

*Because physical structures are very old, the electrical network is very old, the hydraulic structure cracks all the time; it's something that we keep trying to fix and if I bought everything new, I would*



*work for about ten years without having to fix it, for example. (GF Health Region 2).*

*We need transportation. How can I send the team to offer care, for example, at home? First, we have to solve the basic structural issues and then to think about offering a quality service. (GF Health Region 5).*

The lack of supplies, materials, and medicines, added to difficulties in planning purchases and acquisition, harm PHC practices dependent on these resources, impacting the achievement of good results at work. That quote appears repeatedly 22 times and is placed as a factor that compromises the continuity of health care.

*I had to buy cotton, because otherwise the vaccination would stop and I had in my head: the ADMC [central administration], the secretary of health and the governor, do they know that the manager is buying cotton with his own resources so that the vaccination doesn't stop? (GF Health Region 6).*

*Sometimes another unit needs more of that medicine and does not have access, and sometimes I have it and my population hardly uses that medicine. But there is no planning for that. (GF Health Region 4).*

*Another thing, the direct public administration and the means of purchase in the DF today harms a lot, so, in the middle of the dengue epidemic, we have many UBS without serum supply; the tents often lack oral rehydration serum; we have been monitoring sterile gloves in our management; we face a chronic shortage after the monitoring of orders. It is not uncommon for us to have to give our gloves away to hospitals. (GF Health Region 7).*

## Discussion

The results of this study reveal the existence of important weaknesses related to structure as a component that directly influences PHC

quality in DF, especially work management, UBS physical structure and care organization, according to the perception of local managers.

Regarding work management, the concern with the development of adequate, available and qualified human resources to meet the health needs of the population has been a central part of the global, regional and national agendas in recent decades. However, there is a persistent undervaluation of the role of human resources as a factor of social change due to the perception that they account for a growing expense, and not for an investment to improve health and generate development<sup>16</sup>.

Inequities in the availability, distribution and quality of professionals persist among countries and, internally, among levels of care, and between public and private sectors. In DF, the conditions are different. Professionals do not always fulfill the profile and skills or intercultural focus, nor are they always in the right place and time to improve health of the communities they service<sup>16</sup>.

The insufficient number of professionals, which is mainly related to physicians and ACS in DF, seems to be influenced by several aspects: the number of vacancies for the medical category has not been filled in in government tenders; the reduction in the number of ACS per team determined in the new National Primary Care Policy; the difficulty of SES/DF human resources sector to structure the sizing of personnel according to training and experience profile.

The non-encouragement of ACS participation within teams was expressed in the National Primary Care Policy<sup>17</sup> and in the District Policy<sup>18</sup>, both admitting the composition of teams with a reduced number of ACS – or even without them –, indicating a regressive movement in relation to transformation horizon of care model. The commitment to health care guided by the combination of health needs, territorialization, enrollment of clientele, bonding, health responsibility and person-centered care is being weakened by that possibility.

The increase in administrative activities due to the absence of workers for the function is associated with the overload of the others, who started to include in their routine what Scherer et al.<sup>19(2265)</sup> called “chronophagic activities”, i.e., the reduction of the time that should be allocated to users’ health care. Overload has been reported in the literature, being associated to illness, lack of motivation for work, dissatisfaction; it should also be taken into account the work outside working hours, travel time to the place of work, domestic chores after formal work, and time that workers think about work outside the work environment<sup>20</sup>.

Policies that ensure PHC recruitment and retention of professionals with correct profile are a global challenge, especially in remote areas or vulnerable populations. This research respondents suggest bonuses for professional performance as an alternative to payment for the simple fact that the professional is assigned to UBS, according to DF’ PHC policy, known as ‘Convert’<sup>9</sup>.

‘Convert’ created new rules for PHC operation and implementation and determined that, in order to remain staffed and entitled to financial bonuses, medical professionals, nurses and nursing technicians who worked for the traditional model should formalize their interest, undergo a simplified training process, and the physicians should also provide a written assessment of the knowledge acquired<sup>9</sup>.

The performance evaluation of professionals, as suggested by local managers, is a constant theme in the quite controversial debates, which comes connected to a certain standardization of conducts or procedures so to achieve certain outlined objectives<sup>21</sup>. Standardization is important, but it has its limits, as indicated in the results. Standardizing working hours and information to users is different from standardizing clinical conducts, which vary as to the condition singularities.

The way in which the new policy was implemented suffered criticism from this study participants with regard to the retention of professionals without appropriate profile,

bringing problems regarding competencies. However, the low PHC valuation within the health system is also an explanatory element brought by local managers in case there remains a contingent of people with low capacity to qualify the care provided.

The training and continuing education of care professionals and local managers addressed to PHC attributes and to the health needs of the population, are a strategic issue. There are weaknesses as to EPS performance, such as work overload and insufficient staff, lack of planning, lack of appreciation, and inadequacy of initiatives<sup>1,22</sup>.

It is necessary to think on how those educational processes can be incorporated into the daily routine of services as learning on the job and by means of work situations, centering on actual needs, making sense for workers.

Furthermore, local managers noted that adequate working conditions to ensure PHC quality, with availability of supplies, materials and medicines, and appropriate physical structure, contributes to safe care practices<sup>22</sup>.

Regarding UBS physical structure, there is a consensus that in DF there is a need for further investments. According to the typology of UBS structure in DF, among the 157 UBS evaluated, only three (1.9%) were classified as Type A. That represents a unit that meets 80% or more of the structural quality criteria and that enjoys ideal or almost ideal conditions for the operation and provision of quality actions and services. On the other hand, 31.2% of UBS was classified as Types D or E, meeting less than 60% of the structure quality criteria<sup>23</sup>.

Adapting UBS infrastructure is not only a challenge for DF, it is one of PHC challenges in Brazil. Adequate physical structures indicate better performance throughout the work process and, consequently, in the results. So, those UBSs of precarious structure become an architectural barrier to user access, especially for the elderly and disabled people<sup>24</sup>.

The issues most strongly associated to structural failures are the number of offices, state of conservation, lack of maintenance and

replacement of resources, and accessibility<sup>1,22</sup>.

According to a structural diagnosis carried out in DF in 2021, more than 40% of UBSs faced an insufficient number of telephones, telephone networks, and computers, confirming the findings of this study. Low availability of equipment and/or supplies was identified, such as: mobile electric secretion aspirator (40.9%); semi-automatic external defibrillator (23.9%); spacer for pressurized metered-dose inhaler (44%); adult valved spacer (20.8%); incubator for biological testing (25.8%); clinical flashlight (34.6%); ultrasonic washer (1.9%); adult lung resuscitation bag (27%); pediatric lung resuscitation bag (18.9%); automatic sealer (28.3%); and infrared digital thermometer (40.3%)<sup>25</sup>.

Improvements in UBS construction, renovation and expansion continue to be necessary for PHC. A complex and integrated policy at the national and local levels are also necessary to broaden and qualify clinical, support, and information and communication technology equipment. However, funding constraints seriously threaten the development of a rational and integrated public policy for expanding and updating work tools, connectivity, and supplies<sup>1</sup>.

Territorial approach, provided with adequate definition of team coverage area, an actual DF flaw, is another relevant aspect for the organization of care that enables health knowledge conditions of the population and the existing resources, contributing to the planning and monitoring of actions and favoring intersectoriality<sup>26</sup>.

Information systems used were also acknowledged in this study as a structural issue impacting the quality of services. In addition to professionals facing systems not connected to each other, the lack of training for their use can negatively influence the provision of care. Information Technologies are a world of opportunities aiming to improve personal, professional and organizational development. However, its effective use goes far beyond availability and structure; teams need training to operate them so that they perceive these technologies as PHC allies of quality<sup>27</sup>.

The lack of communication among service workers, the lack of knowledge on Health Care Network (RAS) services, and the lack of EPS generate a work characterized as lonely due to the lack of feedback from the services to which the user was referred and the low accountability of professionals involved in the care, compromising the effectiveness of reference and counter-reference processes<sup>28</sup>.

One of PHC strengthening aspects concerns the creation of strategies to encourage collaborative work, integrated with the other levels of the health system, and accessing clinical information, both from the public and private systems, which would allow for physical displacement between knot points, without informational barriers. Regulation centered on PHC by means of clinical protocols that allow for the qualification of the reference and counter-reference process, the creation of matrix support, be it in person or at distance, favors the integration of PHC with the health system by leveraging communication among teams, so contributing to the increase of PHC problem-solving capacity<sup>21</sup>.

Even considering the limits of this study due to restricted participation of local managers, its validity to guide strategies for improving UBS structure stands out, and is essential requirement for the consolidation of ESF model.

## Final remarks

The results evidenced the existence of a weakened PHC structure in DF, influencing the provision of safe and quality health care to the population.

As possible ways to improve the structure component, the following might be taken into account: the allocation of professionals with a profile aligned with PHC in the UBS, both in the care and management teams; changes in the payment of bonuses; an EPS policy appropriate to the needs of the work; the integration of information systems among the levels of care; the improvement of the practice

of reference and counter-reference; greater investment in the maintenance and renovation of UBS physical structure; and greater organization and efficiency in the acquisition and distribution of materials and supplies. Such measures, to which converge the existing literature, would be able to impact the quality improvement of PHC services provided in the Federal District.

## Collaborators

Scherer MDA (0000-0002-1465-7949)\* worked in the design, planning, collection, and

data interpretation, writing of the manuscript, critical review of the content, and approval of the final version. Forte E (0000-0002-6042-5006)\* and Abreu BF (0009-0005-3596-9158)\* worked in data interpretation, critical review of the content and approval of the final version. Aguiar RS (0000-0003-0335-2194)\*, Santos EM (0000-0003-1474-9111)\* and Xavier MF (0000-0002-1885-9513)\* worked in data interpretation, writing of the manuscript and approval of the final version. Poças KC (0000-0002-1254-8001)\* worked in data collection and interpretation, writing of the manuscript, critical review of the content, and approval of the final version. ■

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