Family Health Strategy Care Accessibility in West Bahia

ARTICLE

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> Abstract This study assessed the Family Health Strategy (ESF) health care accessibility in the municipal system, which is the health macro-region headquarters in Bahia. It consisted of two levels of analysis: the municipal management and the local organization of ESF teams. Data production combined documentary analysis, non-participant observation, and interviews with managers, professionals, and users. Goal-image was used with evaluative criteria and dimensions of the accessibility in Primary Care. Family Health Teams (EqSF) still do not entirely fulfill the role of preferential contact in municipal health services, and the health care accessibility reflects the interdependence of municipal and local factors. Rural and peripheral teams performed better in organizational accessibility, and central urban teams performed better in geographic accessibility. The assessment focused on geographic and organizational criteria, combining different sources of evidence and health system players using analysis levels considering the municipal and local PHC management are relevant contributions of this study, which can be extended to other municipal systems with similar characteristics.

> **Key words** *Health Services Accessibility, Primary Health Care, Family Health Strategy*

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Introduction

Primary Health Care (PHC) is the user's first contact with health system services. It solves most people's problems¹. In the international and national setting, PHC stands out mainly for overcoming fragmented care models through accessibility².

In Brazil, the Family Health Strategy (ESF) was adopted as the main alternative for reorganizing the care model and gateway to the Unified Health System (SUS), expanding the population coverage of primary services since the 1990s. This movement attributed to the municipal power political and administrative responsibility to implement and manage Family Health Teams (EqSF)³.

Increased life expectancy, regional inequalities in access to health services, higher prevalence of chronic conditions, the maintenance of emerging health problems, and the external causes of morbimortality generate fundamental challenges for the ESF to organize the care process⁴. Several authors have characterized this setting as epidemiological polarization that, in the face of new emerging problems such as the COVID-19 pandemic and significant regional inequality contexts such as the Northeast of Brazil, enhance hardships for the EqSFs to organize, manage, and provide orderly care.

In this sense, health assessment becomes essential since it allows understanding an intervention or its components to support health decision-making⁵. Assessing accessibility in PHC has multiple connotations, and we considered, in this study, the characteristics of the offering and how people perceive and use services from political-geographic-organizational elements⁶.

More challenges prevail over positive results on PHC's performance in accessibility in health systems. Satisfactory results were identified in the United Kingdom and the United States (U.S.). by extending opening hours in the night shift and weekends and establishing a deadline of 24 hours for attendance⁷. In the national setting, better performance was related to implementing reception, qualified listening, and communication between users and professionals⁸.

In Australia, Slovenia, and Scotland, the lack of means of transport in the territories limited the choice of opening hours for users in rural areas⁹. At the international level, regional inequalities in geographic access were more significant in remote areas and rural areas, with long waiting times for scheduling appointments and service and problems with PHC telephone lines impaired communication between users and receptionists^{10,11}.

In Brazil, PHC accessibility challenges encompass both geographic and organizational aspects. The first includes the distant location between health units and homes, inadequate local infrastructure, unavailability of transport, wrong territorial demarcations, and urban violence7,9,12. Regarding organizational aspects, there is a long waiting time for care, preference of users seeking medium- and high-complexity services12, predominance of disease-centered practices13, incomplete use of primary services, architectural barriers for people with disabilities, reception actions not implemented¹⁴, discontinuity of care due to insufficient staff¹⁵, unwieldy opening hours, long waiting times for tests and visits by Community Health Workers (ACS)¹⁶.

Assessing accessibility with different methodological approaches is relevant to the qualification of health services, and the analysis of international and national literature records heterogeneous scenarios in the assessment of accessibility. The investigations on PHC had a predominantly organizational focus^{8-11,16}. The international methodological approaches were centered on national studies9-10, and the Brazilian ones had targeted research with municipal scope in metropolitan urban territories or capitals¹⁴⁻¹⁶. While municipal studies predominated nationally, mixed evaluative studies were rare, emphasizing geographic and organizational criteria, and conducted in PHC in remote health regions with a large territorial extension, such as the West of Bahia and the Northeast of the country. Finally, most of the studies that assessed accessibility in the ESF did not include municipal management as a level of analysis, limiting themselves to evidence from the perspective of local actors such as users and health professionals^{2-4,7-16}.

This study aimed to broaden the evaluative spectrum, also considering the organization of municipal management as an analytical level to elucidate contextual relationships between municipal political decisions and the local performance of accessibility in the EqSFs. From this perspective, we evaluated accessibility to care in the ESF in a municipal system, which is the seat of the health macro-region in the state of Bahia.

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Methods

Study design and setting

This is a two-level analysis evaluative study: organization of the municipal health system and local organization of the EqSFs. The study setting was a reference municipality for 35 small and medium-sized municipal systems and is the most populous territory of the West Bahia health macro-region, with a significant territorial extension¹⁷.

The municipal PHC was expanding, with 29 EqSFs implanted and 63% population coverage, two Type-I Extended Family Health and Primary Care Centers (NASF-AB), and 12 Primary Health Units (UBS), four of which from rural areas and eight from urban areas.

Selection criteria and data collection

Four evaluative settings were selected in the analysis of the EqSFs' local scope. Criteria that prioritized the diversity of local features were considered, namely: location, physical structure shared with another team, number of registered users, structure and work process overall performance, number of social facilities in the covered territory, NASF-AB support, and doctor, nurse and dentist with Family and Community Health training (Chart 1).

We used documentary analysis of Municipal Health Plans (PMS) (2014-2017 and 2018-2021), Annual Management Reports (RAG), Annual Health Programs (PAS) (2014-2018), and EqSFs work agendas. In these documents, we sought to understand how municipal management established coherence between PMS' proposals and actions implemented related to the criteria for assessing the accessibility of this study.

Interviews were carried out with professionals, users, and municipal management in 2018. The chain of key informants was used to select the subjects, particularly Community Health Workers (ACS) and EqSF managers.

Participants in the study were users aged ≥ 60 years, registered and ascribed to the teams, who used the PHC service in the last 15 days and with preserved communication capacity. The older adults were prioritized as sources of evidence, given the wide use in accessibility assessment surveys. The professionals had at least one year seniority in the EqSFs and were those with greater involvement in the work process. On the other hand, the managers had at least one-year seniority and were assigned strategic responsibilities for managing

the EqSFs. Twenty-five actors were interviewed, namely, 16 users, four nurses, four doctors, the municipal health secretary, and the PHC coordinator.

Data analysis

The information produced was triangulated and processed in the QRSNvivo 11 software, considering the study analysis levels and criteria for assessing accessibility, proposed in image-objective by Cunha and Silva¹⁵, in the public domain and validated in a municipal case study. The methodological selection of the image-objective considered its analytical breadth, as it includes criteria from the municipal management and the local EqSF organization, including geographic accessibility – referring to the distance to the service and commuting time – and organizational aspects – related to the waiting time, queues, appointment, and test scheduling systems, opening hours, referral, and counter-referral.

Ethical aspects

The Human Research Ethics Committee approved the study. Respondents signed an informed consent form to participate in the research.

Results

System organization

The municipal management's organizational level obtained a satisfactory score (18.5 out of 25), although obstacles were identified to ensure PHC as the preferred gateway to the health system (Table 1).

The municipal management defined proposals related to the implantation of the ESF in the PMS. Ten of the 32 proposals identified supported the guarantee of accessibility as a government guideline. The minority had clear evidence of implementation in the Annual Management Reports (RAG). The analysis of the RAGs revealed a persistent scenario of contradiction between the municipal government proposals and the actions implemented to secure accessibility in the ESF. This was observed by the low number of actions fully accomplished concerning the goals established in the PAS.

Despite municipal guidelines to guarantee of accessibility in the ESF, the prioritization of management and organizational accessibility of

Characteristics	Teams					
Characteristics	Α	В	С	D		
Location	Rural	Urban central	Urban central	Urban peripheral		
Shared physical structure	No	No	Yes	No		
Number of ascribed users	292	4,708	1,520	4,126		
Overall structure and process	Low	Low	Adequate	Adequate		
performance						
Number of social facilities	2	3	6	1		
Doctor with residency in FCM*	No	No	No	Yes		
Nurse with residency in FCH**	No	No	No	Yes		
Dentist with residency in FCH**	No	No	No	Yes		
Supported by NASF-AB	No	No	Yes	Yes		

*Family and Community Medicine; **Family and Community Health. Source: Elaborated by the authors.

Table 1. Score of accessibility at the municipalmanagement organization level.

Dimension	Criteria	Municipal Management	Maximum score
System	1. Ensuring	2.5	5
Organization	access as a government guideline 2. Basic network: gateway to other levels	16	20
Total score		18.5	25

Note: satisfactory classification - score achieved greater than or equal to 18 points, unsatisfactory - score less than or equal to 17.5.

Source: Elaborated by the authors.

the teams prevailed, with rare proposals regarding the geographical dimension of accessibility to care.

The municipal government proposals remain limited to expanding the PHC population coverage and hardly centered on the qualification of the work process, expressing a decision-making tendency for structural issues to the detriment of organizational factors, as ratified in the PMS and RAG.

The factors related to the organization of the municipal system produced managerial constraints in the provision of local care, with direct implications for ensuring accessibility. Criteria dependent on municipal government decisions and actors outside the local territory extrapolated the governability of the EqSFs and interfered with the performance of accessibility.

The lack of a clear municipal guideline produced diverse settings for organizing the PHC appointment scheduling process. While this scenario suggested some local management autonomy to define the process of scheduling appointments, it created accessibility barriers in teams with not very flexible schedules (only one day a week) or for vulnerable groups (older adults and pregnant women).

The analyzed documents and interviews with users and professionals revealed gaps in municipal guidelines for implementing innovations in scheduling appointments at the EqSFs, such as the lack of telephone appointments. We observed the maintenance of the organizational model of municipal systems, whose available appointments and specialized tests are distributed to the EqSFs on a quota basis, according to administrative criteria, disregarding the territorial needs and features. Professionals and managers were unanimous in stating that this logic did not meet the teams' needs, with a long waiting time between scheduling and access.

In the PMS analysis, we identified municipal proposals for implementing reception services and strengthening the population's bond with the EqSFs, but they hardly translated into concrete actions of professional Continuing Health Education.

Despite identifying municipal proposals for structuring the referral and counter-referral system in the PMS, communication between EqSFs and other points of care is still essential to ensure access to care. The professionals indicated that this process was ineffective in different situations, mainly due to counter-referrals that rarely occurred.

The health units were set up in improvised and leased locations, demarcated according to the availability of private properties and not through a sociosanitary analysis of the local territory. The distant location between most of the EqSFs and the Specialized Care Center (SCC) and the laboratory services of the network itself was a restrictive factor for PHC to order care for SC, representing substantial territorial inequalities in geographic accessibility.

Local organization

EqSF did not yet fully comply with the accessibility attribute. The performance in teams belonging to the same municipal health system was heterogeneous and classified as intermediate, whose variation was 36.5-46.5 points (Table 2). Professionals and management stated that constraints to guarantee accessibility at the local level of EqSFs are related to user demand in the complaint-conduct model, in order to make access to specialized exams feasible; inflexible hours at the health units; geographical barriers for users to access specialized care and laboratories; counter-referral system's poor functioning; and polarized telephone appointment scheduling mechanisms.

Teams in rural and peripheral territories performed better in the criteria of organizational accessibility, in particular: waiting list management; user reception process; waiting time for scheduling appointments at health facilities; waiting time between appointment and service; and waiting time to be attended at the appointment. The best performances involved criteria related to geographic accessibility (Table 2) in the teams with central urban characteristics.

The model of offering programmatic actions still dominates health practices to the detriment of the organized offering model. According to the interviews of professionals and managers, the guarantee of accessibility was assured through special health programs' actions.

The main signs of user recognition of EqSF as a first access service were related to the professionals' knowledge and the location of the health unit. Work schedules and interviews with professionals and users confirmed the lack of innovations in the opening hours of health units (administrative hours prevail), and that hardly contributed to EqSF being the preferred gateway for night and weekend care.

In rural and peripheral teams, health units' opening hours were more restricted due to the displacement of professionals and safety. In central urban teams, the restrictions were related to professionals' non-compliance with the workload, confirmed by users who reported discrepancies between the time defined by the management and that adopted by the teams.

The obstacles to accessibility in scheduling and using PHC appointments were more evident in EqSFs that adopted schedules by vulnerability groups, week days or shifts, for passwords with a limited number of daily appointments or segregation of vacancies between walk-in and organized demand.

Users, especially those living far from the units or with functional limitations for commuting, mentioned the ACS as intermediaries in scheduling appointments.

The EqSF had no governability to order care for specialized care. While scheduling appointments and tests were decentralized in the health units, the distribution of the offering among the territories registered was under the authority of the Municipal Regulation Center, without any participation by the PHC professionals. Territories with rural and peripheral features had more difficulties in ordering access to the SC due to the lack of markers to manage appointments for consultations and tests, evidencing that remote territories have more obstacles in this process.

Although most local evaluative scenarios are not characterized by the need for transportation to commute to health facilities, they were geographically distant from laboratories and specialized centers. Therefore, there was a need to use public or private transportation to access specialized care.

The interviews with professionals registered the reception and development of waiting rooms as the main receptive spaces for users, far from establishing a reception process cross-sectional to other health practices in the ESF.

EqSFs operating in a physical space shared with other teams had a higher pent-up demand, either for scheduling procedures or care. This structural organization favored people crowding, with long waiting lines starting at dawn.

In summary, municipal and local determinations were responsible for producing polarized scenarios in accessibility to care in contexts with different profiles and configurations. Therefore, Mendonça MM et al.

Maximum Teams Dimension Criteria score EqSF A EqSF B EqSF C EqSF D 5 5 Organizational 1. Facilities working hours 2.5 2.5 2.5 2.5 accessibility 2. Appointment scheduling system 5 5 2.5 5 5 3. Telephone appointment scheduling 0 0 0 0 5 5 2.5 2.5 5 5 4. Appointment and specialty test scheduling 5. Waiting list 4 1.5 1.5 4 5 6. User reception 4.5 4.5 3 3 5 5 2.5 0 0 0 7. Refers through referral system 8. Receives counter-referrals 0 0 0 0 5 Subtotal 21 18.5 12 19.5 40 Organizational 1. Waiting time to schedule an 5 0 0 5 5 barriers appointment 2. Waiting time between scheduling 4.5 4 2.5 4.5 5 and service 3. Waiting time to be attended in the 5 2.5 2.5 5 5 appointment 5 2.5 0 5 4. Queues for scheduling appointments Subtotal 19.5 9 5 19.5 20 Geographic 1. Distance from the user's residence 2 4.5 5 4 5 Accessibility to the USF/UBS 2. Distance from home to CAE and 0 0 0 0 5 laboratory 3 5 3. Transport availability 4.5 4 3.5 5 9 9 15 Subtotal 7.5 36.5 26 46.5 Total score 45.5 75

Table 2. Score of accessibility to care at the local EqSF organization level.

Note: satisfactory classification - total score greater than 54 points, intermediate - total score greater than 27 and less than or equal to 54 points, unsatisfactory - total score less than or equal to 27 points.

Source: Elaborated by the authors.

Table 3. Overall classification of accessibility to care in the evaluation scenario, according to the municipal and local levels of the Family Health Teams, Municipality of the West of Bahia, 2018.

	EqSF A	EqSF B	EqSF C	EqSF D	Maximum score
Total points of the municipality	18.5	18.5	18.5	18.5	25
Total points of the EqSFs	45.5	36.5	26	46.5	75
Total	64	55	45.5	65	100
Overall classification	Intermediate	Intermediate	Intermediate	Intermediate	-

Source: Elaborated by the authors.

this attribute is not dissociated from a systemic analytical view (Table 3).

Discussion

Performance differences between the municipal and local management levels revealed that access to care in the ESF varies according to the municipal guidelines on the organization of PHC in health systems and how the EqSFs organize their work process in the territory, thus occurring a local-municipal interdependence.

The contradictions between the proposed and the implemented by the municipal administrations ratify that this scope did not assume the role of PHC gateway. The alternation of local political projects seems to induce ruptures in the government guidelines, affecting the organization of EqSFs as a preferred contact for municipal health systems¹⁸.

The municipal guidelines that addressed accessibility only emphasized the organizational dimension and fragile analysis of aspects related to the geographical scope, which causes a superficial assessment of this attribute in the studied context with a sizeable territorial extension and communities located in the suburbs and rural areas.

While the expansion of EqSF coverage has identified improvements in the accessibility of rural areas, municipalities with a large rural area such as the one in this study still face challenges of geographic accessibility, whether the great distance between communities and reference teams or unavailability of regular public transport in these territories.

The geographical accessibility of health services refers to the organization of a given territory and relates issues such as time, means of commuting to health services, and the economic situation to afford transport, meaning an articulation between geographic and socioeconomic accessibility¹⁹.

The geographical dimension of accessibility in PHC has also not been the subject of evaluative studies on the topic in Brazil, which has a more significant predominance of research on organizational accessibility. This is because the studies understand that organizational obstacles at the local and municipal level overly affect the accessibility of PHC services, as they directly address issues involving the use of the service. Simultaneously, the geographical dimension would be a minor limiting factor, which may influence, but not necessarily prevent the use of the service⁸.

At the international level, geographic accessibility has been investigated more frequently in countries such as Australia and Scotland, mainly in remote and rural regions more dependent on this aspect^{9,10}. Regional inequalities in geographic access to PHC services stand out, especially in remote and rural areas⁷. Australia, Scotland, and Slovenia territories had limited geographical accessibility to PHC services⁹.

In Brazil, in the perception of professionals and users, the main barriers to geographic access include the unit's location, the local characteristics, transport, and the inadequate delimitation of the coverage territory²⁰. Such perception highlights the territorial demarcation of EqSFs as a decisive factor in implementing health units in places that facilitate the travel of users from their homes to the service.

The EqSFs studied were located far from the SCC, which was identified as a limiting aspect of geographic accessibility, especially considering other physical and financial limitations for traveling to specialized services. These results are consistent with the ESF evaluative studies that point out similar problems related to access to specialized services^{21,22}.

The territorial health disparities should be assessed, especially the elaboration of effective territorialization, which considers the care provided and the formulation of public policies beyond organizational aspects, based on geographical and socioeconomic criteria territorially aligned with the needs of the population¹⁶. In this context, some factors imply PHC accessibility: health needs and how services are organized²³. The needs are mainly related to the users' perception of health, which is a primary factor in the use of the service²⁴, while organizing the services is related to the recognition of the singularities and peculiarities of each community²⁵.

In this research and other Brazilian municipal health systems, users tend to seek PHC based on care and complaint-conduct rationale. Seeking EqSF services occurs, primarily, due to some health problem and because the service is faster²⁴. It is also required because it is necessary to access a visit with a specialist¹⁷, and it is easy to obtain medications, perform basic tests, and obtain referral to specialities and specialized tests²⁶.

Another similarity of this study with other Brazilian scenarios is the complaint of users regarding the limited opening hours of health units at night and weekends, which conditioned the search for other medium- and high-complexity points of care in low urgency cases¹⁸. National and international initiatives implemented strategies to expand the opening hours of service in PHC units and found positive results in accessibility. This strategy has been adopted in Brazil, in Curitiba-PR, Mogi das Cruzes-SP, and Boa Vista-RR¹⁸, and in countries such as the United Kingdom, the Netherlands, and the United States⁷. This helped reduce the risk of fragmented care, overcrowding of emergency services, and curb medium- and high-complexity service expenditure. It is noteworthy that the difficulties of access to the opening hours of the units and the scheduling of appointments, teamwork, and organizing services to walk-in demand²⁷.

In a previous study⁸, the satisfactory assessment of care at the UBS was linked to the resolution of problems. The lack of solutions to the demand and failure to service the walk-in demand makes users seeking emergency services be even guided by EqSF professionals to seek another service, generating negative perceptions about PHC. Thus, the problem related to resolution covers health professionals working in PHC with low capacity to make decisions, identify problems, and propose solutions²⁸.

The pent-up demand in some teams was a reality in the study in question. Many of the explanatory factors reported for arriving early and guaranteeing access to PHC appointments were similar to a large city in the state of São Paulo where users disputed appointment queue tickets¹⁵.

This study identified no standardized process of scheduling PHC appointments. Because EqSFs are not adequately organized to meet the organized offering and walk-in demand, scheduling appointments is also reported as a limiting factor for accessibility in cities such as Ribeirão Preto-SP and Salvador-BA^{8,15}. Again, regarding scheduling appointments in health units, it is recommended that the needs of the population be the primary references for establishing the organization of the functioning of the EqSFs, including the ways of scheduling appointments. Possible adaptations to improve access must be observed, scheduling by phone and e-mail²⁹.

The agents were facilitating elements of the appointment scheduling process in the perception of the interviewed users. However, this facilitation by the ACS must be analyzed with caution, as it reinforces the importance of this worker and can confuse this action as a privilege and, thus, generate frustrations for those who do not have ACS³⁰.

The lack of municipal guidelines for scheduling appointments in PHC denotes that possible innovation in this process is deconcentrated to the local management of EqSFs, and is hardly linked to changes induced by the municipal management level. A set of barriers is linked to the system of scheduling appointments, among them: opening the agenda at a specific time and day, establishing fixed days for population groups, and difficulty in meeting walk-in demand⁷. Such factors can influence the demand for other health care services and corroborate the discretion of PHC as a preferential gateway and organizer of the health care network¹⁵.

The low governance level of the EqSFs to organize specialized care reflects discrepancies, on the one hand, between the needs for equitable distribution of vacancies for appointments and tests for the teams and, on the other, the insufficient specialized offer in municipal health systems in remote regions like the West of Bahia. The SC is mainly supplied by private providers in municipal systems similar to the present study, so that the number of appointments and tests for the SUS is determined by the vacancies available in the agenda of local providers and not by the municipal management^{7,12-14,20,31}.

The scheduling of specialized appointments, prorated in quotas for each EqSF in the municipality, did not meet the local needs of the services and implied low access by users to other levels of care. This critical point restricted the PHC's ability to fulfill its role as a gateway, given the difficulty of referring users to specialized services, since the provision of these appointments depends mostly on the availability of professionals on the network, the number of appointments made available by them in the scheduling system and the number agreed with other municipalities in the health region, which was similar to the municipalities of Feira de Santana and Vitória da Conquista³¹, a large city in the state of São Paulo15, and a host city in the northern region of the state of Bahia³².

Municipal constraints on the local level of EqSFs indicate that the guarantee of accessibility is multidimensional and systemic, thus depending on the action of actors at the primary level, management, and other points of care affecting the system's organization to ensure an orderly care flow. The malfunctioning of the referral and counter-referral system was a classic example of municipal constraints on accessibility, as identified in Salvador-BA23 and in a municipality in northern Bahia³². The factors related to the high demand of users, lack of communication, and articulation with other levels of health care hinder the effectiveness of the referral and counter-referral system and influence the perpetuation of failures in the health system and the comprehensive care to users³³.

The reception practices in the evaluated EqSF proved to be limited to the contact of the recep-

tion. This was a reality that did not correspond to what is proposed in the humanized reception guidelines, which provide for actions that draw health practices closer to users' real needs, establishing conversations, bonding, and serving as an organizational tool in all care activity, whether from scheduled or walk-in demand³⁴. Reception should be understood as follows: as a posture adopted by professionals, a practice that can generate organized procedures, and a guiding principle of an institutional project²⁸. In this way, user reception would be an operational guideline allowing humanized care, organization of health work processes, guarantee of universal access, and resolution.

It is worth remembering that users make the initial choices, such as choosing an appointment and its location. They also have the power to comply or not with the guidelines and referrals. Therefore, it is vital to consider subjectivity when assessing accessibility in order to understand the extent to which the adequacy of the organization and the provision of services is linked to the characteristics of users, considering their socio-cultural, educational, economic, ethnic, class, and gender conditions, their health status, expectations, needs, and experiences.

Besides listening to the "users' voice", it is necessary to change power relations. Stimulating participation does not merely mean giving users space to speak but seeking a shared responsibility with the availability for greater dialogue of knowledge and construction of autonomy³⁵. The operationalization of the comprehensiveness principle is facilitated through the recognition of users as subjects of law. However, barriers in people's accessibility compromise compliance with comprehensiveness and create social injustice situations.

Accessibility is a fundamental attribute for the effective establishment of PHC as the preferred gateway. Thus, PHC becomes an essential locus in the fight against social inequalities and promoting universal services, and care equity, and comprehensiveness. In this sense, it becomes essential to identify barriers that hinder accessibility and reflect issues in organizing health care and caring for the population.

The challenges to guarantee accessibility evidenced in this study show that the fulfillment of this attribute is closely related to municipal and local determinants of EqSFs. Therefore, management should value accessibility and resolve its restrictive factors to establish PHC as the preferred gateway. The different characteristics of the EqSFs and territories set essential variations in the general classification of access to care in the evaluated setting. Suburban and rural contexts tend to be more challenging for EqSF to overcome geographical barriers to accessibility, whereas organizational barriers tend to be challenging in urban contexts.

The heterogeneous local performance of accessibility identified in this research reflects a significant contextual variability of the territory and characteristics of the EqSF work process as decisive factors for the coexistence of more significant or lesser geographical and organizational hurdles.

The contributions of this study stand out for the analytical breadth of the determinants of municipal and local management of accessibility to care; the incorporation of multiple sources from the perspective of managers, professionals, and users and of municipal documents and teams, composing an evaluative framework with greater depth; the assessment of accessibility with the inclusion of geographic and organizational criteria, allowing its results to establish connections with the analysis of other municipal systems located in regions and with similar political-administrative-organizational characteristics.

The main limitations of this research include the superficial analysis of geographic determinants, given justifications already presented in the results and the limitation for the inclusion of supporters of the municipal PHC management, which prevented further depth in the analysis of the organization of the system, from the perspective of other actors that participate in the management and monitoring of EqSFs.

Improvements are needed in the organization of appointment scheduling, reception, scheduling of specialized visits, the referral, and counter-referral system, and the measurement of the spatial distribution of health units, especially in the suburban and rural communities of the municipality. The results of this study will hopefully serve as a basis for supporting decision-making and EqSF qualification processes. Future research is recommended to deepen the assessment of accessibility in PHC by comparing organizational models. Issues such as failure in the referral and counter-referral system, geographical accessibility, and socioeconomic aspects of the population and intersectionality of gender, class, and ethnicity; and political accessibility geared to users' participation space should be considered to broaden the understanding of accessibility in PHC.

MM Mendonça and IRS Aleluia participated in the study design, data collection, and paper writing. MLT Sousa and M Pereira contributed to the writing and critical review of the manuscript. All authors approved the final version of the paper. All authors declare that they have no conflicts of interest.

References

- Giovanella L, Mendonça MHM. Atenção Primária à Saúde. In: Giovanella L, Escorel S, Lobato LVC, Noronha JC, Carvalho AI, organizadores. *Políticas e Sistemas de Saúde no Brasil.* 2ª ed. Rio de Janeiro: Editora Fiocruz/Centro Brasileiro de Estudos de Saúde; 2013.
- Lavras C. Atenção primária à saúde e a organização de redes regionais de atenção à saúde no Brasil. Saude Soc 2011; 20(4):867-874.
- Batistão GT, Chaves MD, Gomes JO. Análise de dispositivos externos de acessibilidade nos serviços municipais de saúde: uma abordagem para deficientes físicos. *Rev Bras Pesq Saude* 2014; 16(4):32-38.
- Camargos MCS, Gonzaga MR. Viver mais e melhor? Estimativas de expectativa de vida saudável para a população brasileira. *Cad Saude Publica* 2015; 31(7):1460-1472.
- Brousselle A, Champagne F, Contandriopoulos AP, Hartz Z, organizadores. *Avaliação: conceitos e métodos*. Rio de Janeiro: Editora Fiocruz; 2011.
- Donabedian A. An introduction to quality assurance in health care. New York: Oxford University Press; 2003.
- Rocha SA, Bocchi SCM, Godoy MF. Acesso aos cuidados primários de saúde: revisão integrativa. *Physis* 2016; 26(1):87-111.
- Gomide MFS, Pinto IC, Bulgarelli AF, Santos ALP, Serrano GMP. A satisfação do usuário com a atenção primária à saúde: uma análise do acesso e acolhimento. *Interface (Botucatu)* 2018; 22(65):387-398.
- Figueira MCS, Silva WP, Silva EM. Acesso aos serviços da Atenção Primária em Saúde: revisão integrativa da literatura. *Rev Bras Enferm* 2018; 71(3):1178-1188.
- Ford JA, Turley R, Porter T, Shakespeare T, Wong G, Jones AP, Steel N. Access to primary care for socio-economically disadvantaged older people in rural areas: A qualitative study. *PloS One* 2018; 13(3):e0193952.
- Hlebec V. Evaluation of Access to Long-term Care Services for Old People Ageing in Place in Slovenia. Zdr Varst 2018; 57(3):116-123.
- Corrêa ACP, Ferreira F, Cruz GSP, Pedrosa ICF. Acesso a serviços de saúde: olhar de usuários de uma unidade de saúde da família. *Rev Gaúcha Enferm* 2011; 32(3):451-457.
- Santos WJ, Giacomin KC, Firmo JOA. Avaliação da tecnologia das relações de cuidado nos serviços em saúde: percepção dos idosos inseridos na Estratégia Saúde da Família em Bambuí, Brasil. *Cien Saude Colet* 2014; 19(8):3441-3450.
- Albuquerque MSV, Lyra TM, Farias SF, Mendes MFM, Martelli PJL. Acessibilidade aos serviços de saúde: uma análise a partir da Atenção Básica em Pernambuco. Saude Debate 2014; 38:182-194.
- Cunha ABO, Silva LMV. Acessibilidade aos serviços de saúde em um município do Estado da Bahia, Brasil, em gestão plena do sistema. *Cad Saude Publica* 2010; 26(4):725-737.
- Campos RTO, Ferrer AL, Gama CAP, Campos GWS, Trapé TL, Dantas DV. Avaliação da qualidade do acesso na atenção primária de uma grande cidade brasileira na perspectiva dos usuários. *Saude Debate* 2014; 38:252-264.

- Pedraza DF, Nobre AMD, Albuquerque FJB, Menezes TN. Acessibilidade às Unidades Básicas de Saúde da Família na perspectiva de idosos. *Cien Saude Colet* 2018; 23(3):923-933.
- Silva AN, Silva SA, Silva ARV, Araújo TME, Rebouças CBA, Nogueira LT. A avaliação da atenção primária a saúde na perspectiva da população masculina. *Rev Bras Enferm* 2018; 71(2):236-243.
- Lima SAV, Silva MRF, Carvalho EMF, Pessoa EAC, Brito ESV, Braga JPR. Elementos que influenciam o acesso à atenção primária na perspectiva dos profissionais e dos usuários de uma rede de serviços de saúde do Recife. *Physis* 2015; 25(2):635-656.
- Santinha G. Cuidados de saúde e território: um debate em torno de uma abordagem integrada. Saude Soc 2013; 22(3):815-829.
- Silva LOL, Dias CA, Soares MM, Rodrigues SM. Acessibilidade ao Serviços de Saúde: Percepção de usuários e profissionais de saúde. *Cogitare Enferm* 2011; 16(4):654-660.
- Silva LA, Casotti CA, Chaves SCL. A produção científica brasileira sobre a Estratégia Saúde da Família e a mudança no modelo de atenção. *Cien Saude Colet* 2013; 18(1):221-232.
- Savassi LCM. Qualidade em serviços públicos: os desafios da atenção primária. Rev Bras Med Fam Comunidade 2012; 7(23):69-74.
- Oliveira LSA, Almeida GN, Oliveira MAS, Gil GB, Alcione BOC, Medina MG, Pereira RAG. Acessibilidade a atenção básica em um distrito sanitário de Salvador. *Cien Saude Colet* 2012; 17(11):3047-3056.
- Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? *J Health Soc Beha* 1995; 36(1):1-10.
- Santos WJ, Giacomin KC, Firmo JOA. Avaliação da tecnologia das relações de cuidado nos serviços em saúde: percepção dos idosos inseridos na Estratégia Saúde da Família em Bambuí, Brasil. *Cien Saude Colet* 2013; 19(8):3441-3450.
- Mendes ACG, Miranda GMD, Figueiredo KEG, Duarte PO, Furtado BMASM. Acessibilidade aos serviços básicos de saúde: um caminho ainda a percorrer. *Cien Saude Colet* 2012; 17(11): 2903-2912.
- Pessoa BHS, Gouveia EAH, Correia IB. Funcionamento 24 horas para Unidades de Saúde da Família: uma solução para ampliação de acesso? Um ensaio sobre as "Upinhas" do Recife. *Rev Bras Med Fam Comunidade* 2017; 12(39):1.
- Barbosa SP, Elizeu TS, Penna CMM. Ótica dos profissionais de saúde sobre o acesso à atenção primária à saúde. *Cien Saude Colet* 2013; 18(8):2347-2357.
- 30. Brasil. Ministério da Saúde (MS). Portaria nº 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da Atenção Básica, no âmbito do Sistema Único de Saúde (SUS). *Diário Oficial da União* 2017; 24 set.
- Cruz MJG, Hogla CM. Acessibilidade dos idosos na Rede Básica de Saúde. *Rev Enferm UNISA* 2009; 10(1):48-52.

- 32. Almeida PFDE, Santos AM, Souza MKB. Atenção Primária à Saúde na coordenação do cuidado em Regiões de Saúde. Salvador: Edufba; 2015.
- 33. Aleluia IRS, Medina MG, Almeida PF, Vilasbôas AALQ. Coordenação do cuidado na atenção primária à saúde: estudo avaliativo em município sede de macrorregião do nordeste brasileiro. Cien Saude Colet 2017; 22(6):1845-1856.
- 34. Pontes APM, Cesso RGD, Oliveira DC, Gomes AMT. O princípio de universalidade do acesso aos serviços de saúde: o que pensam os usuários? Esc Anna Nery 2009; 13(3):500-507.
- 35. Sales IC. Os Desafios da Gestão Democrática. In: Anais IV Seminário Internacional de Representações Sociais, Subjetividade e Educação/VII Seminário Internacional sobre Profissionalização Docente. Recife; 2005. p. 16996-17009.

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