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Health regulation: demand and challenges of the family health strategy in an inland municipality of the State of Ceará, Brazil

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ABSTRACT. This study aimed to analyze the demand profile and the challenges of regulating access to specialized care, considering the referenced cases and the perspectives of physicians in the Family Health Strategy (FHS). This was a mixed methods study, with a quantitative and qualitative approach, carried out in an inland municipality of the state of Ceará, Brazil. Quantitative data were obtained from Primary Health Care (PHC) referral forms, registered with the regulation center. Focus groups were held, involving 13 FHS physicians. The results showed 643 referrals, the majority (74.2%) corresponded to the request for tests, and 61.6% did not have a diagnostic hypothesis, which corroborates the increase in waiting time. Spine tomography was the exam with the highest amount in relation to the shortest waiting time. Regarding consultation, otorhinolaryngology was the specialty with the highest demand (17.7%). Physicians reported weaknesses and challenges in regulation, such as communication failures and the lack of counter-referral flows, which compromise Primary Health Care coordination, continuity and resolvability. The need to reorganize and qualify the regulatory processes in the municipality is pointed out.

Keywords: primary health care; health care coordination and monitoring; health services accessibility; comprehensive health care; health management.

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Introduction

Health care regulation within the scope of the Unified Health System (SUS) is a management tool, which aims to promote equity in access to health services and actions, making it possible to equate the need, supply and demand relationship, making it compatible with the health reality. Therefore, it allows the rationalization and priority allocation of consultations and specialized tests, which can contribute to expand the resolvability of the health system, particularly Primary Health Care (PHC), by guaranteeing the integrality and continuity of care for citizens (Vilarins, Shimizu, & Gutierrez, 2012; Barbosa, Barbosa, & Najberg, 2016).

PHC is considered central in structuring of the Unified Health System (SUS), a public model of health actions and services in the Brazilian State, guided by universality, equity and integrality of health care. The implementation of its principles, considering the broad concept of the right to health, requires the provision of care at different levels of complexity and technological density, within the scope of the Health Care Network (HCN), with a regionalized organization (Noronha, Lima, & Machado, 2012; Vieira-Meyer et al., 2020). In the process of building the SUS, the Family Health Strategy (FHS) was adopted as a reorganizer of the PHC, being responsible for providing attention and coordinating care, functioning as a first contact and promoting the integration of different services that make up the health care network (Giovannella & Mendonça, 2012; Vaz et al., 2018).

Indeed, over the last few decades, there has been a significant expansion of FHS coverage and user access to health services, favoring the universalization of primary care. However, the movement to expand PHC was not accompanied by equal investment in structuring the other levels of care in the SUS (Spedo, Pinto, & Tanaka, 2010). Furthermore, the increase in FHS coverage occurred in a heterogeneous way in the different regions of the country. Thus, challenges to its consolidation persist related to the planning of organization of care practices, integration with other levels of care and coordination of care expressed in the difficulty of

access to specialized care, compromising the quality and resolvability of the services provided (Arantes, Shimizu, & Merchán-Hamann, 2016; Vieira-Meyer et al., 2020).

In the PHC operationalization, integration with the other levels of care in the health system is complex, but necessary to execute its role of care coordination, expressed in the ability to guarantee the continuity of health care, through action of the team, which should recognize the problems requiring constant follow-up and articulate as a communication center within the HCN (Mendes, 2011; Vaz et al., 2018). In this scenario, it is up to PHC professionals, particularly the physician, a member of the Family Health team (eSF), to play the role of gate keeper, defining which users should be referred to specialized care, either for punctual assessment or continued follow-up, as well as those whose demand can be fully met at this level of care. In this way, it is sought to prevent overload in secondary and tertiary care, rationalizing costs, with a view to ensuring efficiency and quality of care (Rebolho, Poli Neto, Pedebôs, Garcia, & Vidor, 2021).

Thus, health regulation instrumentalizes the ordering and coordination of care in the HCN, whose operating guidelines are in line with the principles of SUS, highlighting equity in the provision of services, decentralization and co-responsibility in the commitments made between federated entities within the health region, ensuring continuity of care according to the geographic, political-social and health context. Indeed, a National Regulation Policy was instituted in SUS, operationalized through Regulatory Complexes (RC), implemented at the state, regional and municipal levels. At the regional level, RC generally have shared management between the state secretariat and the municipal health secretariats that make up the region, and regulates the population access to services that are part of the regional and interregional health networks (Barbosa, Barbosa, & Najberg, 2016).

In this context, health regulation has faced difficulties to ensure access to specialized care, which reduces the problem-solving capacity of PHC and the quality of care. Thus, a study (Spedo, Pinto, & Tanaka, 2010) points to bottlenecks in access to medium-complexity services, which still need to expand the offer of procedures. Another study (Pinto, Soranz, Scardua, & Silva, 2017) detected technical-operational problems in the execution of regulatory procedures. In addition to these, failures in referral criteria, reduced supply of procedures, increased pent-up demand and failures in information flows (Bastos et al., 2020).

Based on these considerations, the present study aimed to analyze the challenges of regulating access to specialized care, based on the referenced cases and the perspective of FHS physicians in an inland municipality in the state of Ceará, Brazil.

Methodology

This was an exploratory study on the regulation of access to specialized care, based on referrals of users, carried out by FHS physicians, in which mixed methods were used, combining a quantitative, descriptive and qualitative approach in a critical-reflexive perspective.

The research scenario was a medium-sized municipality, with an estimated population of 43,797 inhabitants (Instituto Brasileiro de Geografia e Estatística [IBGE], 2019), located in the Sertões Cearenses Mesoregion, limited to the 18th Health Region, which is composed of ten municipalities, with a population of 315,459 inhabitants. During the study period, the state of Ceará was organized into 22 health regions, all structured with a system to regulate the supply of medium and high complexity actions and services, according to the Regionalization Master Plan (PDR) of the Health Secretariat of the state of Ceará (SESA) (Ceará, 2014). Regarding the municipality of this study, the health network is organized as follows: 1) PHC Services - 14 eSF and two Expanded Centers for Family Health Strategy and Primary Health Care. Regarding the eSF, eight teams are linked to the six Basic Health Units (BHU) in the urban area and the others in six BHU in the rural area; 2) Medium complexity services - a Dental Specialty Center (CEO) and a Hospital/Maternity. It is noteworthy that specialized care of medium and high complexity is referenced within the scope of the health region. For this, it has an Outpatient Regulation Center.

In the first phase of the study, data were collected at the municipal regulation center, through access to UNISUS-WEB, on referrals to specialized care made by physicians from the eSF/PHC, considering the period from January 2018 to June 2019. The following information was extracted: 1) completion of the referral justification; 2) requested medical specialty; 3) offering the specialty in the health region; 4) record of the disease or diagnostic hypothesis; 5) date of referral. Referrals were identified with a numerical, unique and sequential code.

Information processing involved typing and critical steps with a view to correcting errors and identifying inconsistencies in the data, whose organization constituted a database in Microsoft Excel, later exported to the Statistical Package for the Social Sciences (SPSS) software version 20.0, in which the statistical analyses were run, adopting a confidence interval of 95%. The waiting time was compared in relation to filling out the clinical justification, the medical specialty of the referral and the disease or diagnostic hypothesis described in the document. For the purposes of this study, the user's waiting time was defined as the time span between the date of requesting procedures in specialized care and the moment of data collection. Analyses comprised the distribution of the absolute and relative frequencies of the variables, as well as the application of Pearson's Chi-square and Fisher's Exact tests.

In the qualitative phase, focus groups were held with FHS physicians in the municipality, totaling 13 participants, with only one professional who was on vacation during the data collection period excluded from the study. Considering the professional available hours, two focus groups were held, one with the participation of seven physicians and the other with six professionals. For each focus group, only one meeting was needed, which took place in the Municipal Health Council room.

In each focus group, participants were welcomed, and invited to an initial reflection to favor a peaceful environment for interaction and presentation of speeches on the topic. A guiding script was adopted, based on the results of the first phase of the study, which included the following questions: 1) How do you assess the need for clinical justification in PHC referrals to specialized care? 2) What do you evaluate and expect from a referral from PHC to specialized care? 3) What reflections on this topic are important to improve resolvability in PHC and at the regulation center? At the end of the script, participants were presented with quantitative data to trigger the discussion.

Each meeting lasted an average of one hour and thirty minutes, considered adequate time for apprehending the study object. The group discussions were audio-recorded, heard by participants at the end of the meeting, with the purpose of analyzing their own speeches, being able to remove or add comments. Combined with recordings, the field diary was used to record the researcher's impressions about the group dynamics and the participant recommendations regarding the addition or elimination of speeches.

The empirical material from the recordings was transcribed and later analyzed based on Thematic Content Analysis, following the operational steps described by Minayo (2013): comprehensive reading of the text; coding of participant speeches; elaboration of analysis structures, with grouping of excerpts constituting thematic axes; identification of central ideas; identification of the nuclei of meanings; finally, development of contextualized interpretive syntheses, articulating these results with those obtained in the quantitative phase.

This study respected the ethical precepts of research with human beings. It was approved by the Research Ethics Committee of the Federal University of Ceará, under Opinion 3227742. All participants signed the Informed Consent. To ensure the anonymity of participants, the speech excerpts presented were coded with the letter "M" followed by a sequential roman numeral (I, II, ..., XIII).

Results

The regulation center and the demand profile for specialized care

The Ambulatory Regulation Center operates in its own room at the headquarters of the municipal health secretariat, with a computerized structure using the UNISUS-WEB system. In this way, integration with the regional health system occurs, which allows the identification of available procedures, respecting the agreement of municipal managers within the scope of the Regional Intermanager Committee (CIR).

In total, 643 referrals to specialized outpatient care at the regulation center, from eSF physicians, were found and analyzed. As listed in table 1, most of the requested procedures 99.7% (n= 628) were offered within the health region. Among the medical specialties, the greatest demand for otorhinolaryngologists stood out, 17.6% (n= 113). However, most referrals were for specialized tests, 74.2% (n=477). It was observed that 73.7% (n= 469) of the referrals had a clinical justification, but 61.6% (n= 390) did not contain the description of the diagnostic hypothesis. As for the waiting time, it ranged from 31 to 90 days for 28.6% users, with more than 150 days for 23.4% demand.

Table 1. Distribution of referrals to specialized medical consultations, completion of the clinical justification and diagnostic hypothesis and direction of care and waiting time. Mombasa, state of Ceará, Brazil, 2019 (N = 643).

Variables	n	%
Completion of the clinical justification		
No	167	26.3
Yes	469	73.7
Diagnostic hypothesis		
No	390	61.6
Yes	243	38.4
Requested Procedure/Specialty		
Specialized tests	477	74.2
Orthopedist	17	2.6
Dermatologist	3	0.5
Neurologist	33	5.1
Otolaryngologist	113	17.6
Specialty within the Health Region		
No	2	0.3
Yes	628	99.7
Time of referral for execution		
Up to 30 days	135	21.7
From 31 to 90 days	178	28.6
From 91 to 150 days	164	26.3
>150 days	146	23.4
Total	643	100.0

In Table 2, the waiting time and its relationship with the information provided in referral forms were evaluated. When considering, for example, the absence of a diagnostic hypothesis in the document, there was an increase in time to resolve the referral, and this was statistically significant ($p < 0.001$).

Table 2. Waiting time for scheduling a specialty consultation or test. Mombasa, state of Ceará, Brazil (N = 643).

Variables	Time from referral to completion								p-value
	Up to 30 days		31-90 days		90-150 days		>150 days		
	n	%	n	%	n	%	n	%	
Clinical justification									
No	33	(24.4)	43	(24.2)	44	(26.8)	43	(29.5)	0.698
Yes	102	(75.6)	135	(75.8)	120	(73.2)	103	(70.5)	
Diagnostic hypothesis									
Absent	64	(47.8)	122*	(68.5)	119*	(73.0)	81*	(55.9)	<0.001
Present	70*	(52.2)	56	(31.5)	44	(27.0)	64	(44.1)	
Specialty									
Non-informed	3	(2.2)	3	(1.7)	1	(0.6)	1	(0.7)	<0.001
Orthopedics	10	(7.4)	4	(2.2)	3	(1.8)	-	-	
Dermatology	-	-	2	(1.1)	1	(0.6)	-	-	
Neurology	6	(4.4)	8	(4.5)	11	(6.7)	7	(4.8)	
Otolaryngology	11	(8.1)	16	(9.0)	13	(7.9)	70*	(47.9)	
Echocardiogram	2	(1.5)	9	(5.1)	18*	(11.0)	26*	(17.8)	
Abdominal/pelvic US**	17	(12.6)	45*	(25.3)	26	(15.9)	10	(6.8)	
Brest US	5	(3.7)	26	(14.6)	55	(33.5)	18	(12.3)	
Abdominal CT***	8	(5.9)	4	(2.2)	1	(0.6)	-	-	
Spine CT	35*	(25.9)	14	(7.9)	3	(1.8)	1	(0.7)	
Head and neck CT	26*	(19.3)	12	(6.7)	3	(1.8)	1	(0.7)	
Thorax CT	2	(1.5)	4	(2.2)	-	-	1	(0.7)	
Endoscopy	6	(4.4)	27	(15.2)	28	(17.1)	11	(7.5)	
Level of care									
Health Region (secondary care)	134	(100.0)	175	(99.4)	163	(100.0)	143	(99.3)	0.593
Health macro-region (tertiary care)	-	-	1	(0.6)	-	-	1	(0.7)	

* $p < 0.05$, Fisher's exact test or Pearson's chi-square; **Ultrasound; ***Computed Tomography

Still in relation to waiting time, it was evident that otorhinolaryngology had the longest waiting time for the procedure, given that 47.9% users waited for more than 150 days to be seen at the referral service.

Dermatology showed the lowest demand in all scheduling periods, with the service performed within 150 days. Regarding the demand for specialty exams, spinal tomography had the highest number of referrals, but the highest proportion (25.9%) was performed within 30 days; the echocardiogram had a high proportion of referrals (17.8%) on the waiting list for more than 150 days. Thus, there was a statistically significant relationship between the medical specialty/exam requested and the user waiting time ($p < 0.001$).

Only two procedures required regulation at the tertiary level, as they are not offered within the scope of the health region. Furthermore, no statistically significant relationship was detected between the waiting time and the level of care at which the service is offered.

Access and coordination of care: reflecting on the clinical justification

In this dimension, it is noted that the FHS physicians perceive the health care regulation processes linked to the access and coordination of care as attributes of PHC. For them, who are known to act as the first contact, it is relevant to ensure that the demands are met and the provision of care to users, considering their health needs, as well as the resolvability of this level of care.

You need to [...] welcome (the patient) and show that you know and that you are there to help them. (M XII)

[...] is to be aware that I will only refer what is really needed, and if all alternatives in primary health care have already been exhausted. (M XIII)

Regulation constitutes a care coordination tool, potentially capable of ensuring its continuity. When identifying health problems that require diagnostic support and/or specialty care, FHS professionals must establish links with other services within the structured care network in the health region. Therefore, physicians recognize the importance of clinical justification in the production of care, which must be adequately described in the referral form. This information contributes to the definition of the order of priority in the organization of the user's queue.

[...] the first point to be discussed is that the clinical justification has to serve for us professionals to ask ourselves: do I really need to refer this patient? I replied to myself: Have I requested all the exams? Have I studied about the disease? When I answer and see that I have exhausted all the possibilities, then I really justify describing everything I have already done [...]. (M XII)

A well-detailed clinical history with a well-written chronology and justifying the referral, facilitates both screening at the regulatory center and the specialist upon receipt. (MIX)

The clinical justification is essential, because depending on it and the patient's need, it will be placed first or second in the queue. (M I)

Indeed, the referral form represents a communication tool between professional teams and/or health services. It is observed that the FHS physicians adopt strategies or codes in this communication, in the clinical justification, which must be understood by the technicians of the regulation center or of the reference service, with a view to enabling a shorter waiting time for the user, apparently considering their demand for care, objective or subjective.

Each professional has their own way of communicating; we learn to communicate in a way, which we put in the description of the clinical justification, if it were a medical professional who evaluated in the regulation center they would understand. (M IV)

There are cases where you judge the need and put it urgent. (M IX)

When I refer a serious patient, I already put it urgent. Generally, when the patient asks for a referral, I put it on request (only the letters A/P that the secretary will identify). (M III)

It is also evident that part of the physicians participating in the focus group express the need to rationalize referrals, under penalty of an increase in the waiting list and burden on the health system, due to the request for unnecessary procedures.

[...] we are in primary care, we have to be aware of what we are referring to. The queue will only become real when I understand that there is no need for a particular patient to go. [...] when I refer a patient it will be expensive. (M XIII)

Sometimes, we refer without much need, that's where our reflection comes in when it's time to refer. (M IX)

Fragility in counter-referral flow: challenge to continuity of care

Based on the focus group, it appears that physicians recognize the health responsibility of PHC teams in terms of coordinating and ensuring continuity of care for users in the assigned territory. Therefore, the importance of articulation and communication between the different levels of health care is reiterated.

The patient is in primary care. They will continue to belong to primary care. Specialized attention is a moment. And you need to know what's going on with it so you can handle it. I believe you have to have the set. (M XI)

Thus, the continuity of care of PHC users, referred to specialty care, depends on receiving the counter-referral, which must include the procedures performed and recommendations for follow-up of the case.

I think everyone expects the counter-referral. [...] the issue of feedback, the importance of patient follow-up in primary care. (M I)

However, there is a lack of an established flow of counter-referral that works effectively, ensuring communication between the different services of the care network and PHC. However, some physicians assure that receiving the counter-referral depends on a direct request to the professional who assisted the user in specialty care.

It is necessary for specialty care to carry out the counter-referral, as the patient is lost. The issue of counter-referral is a chronic problem. (M XII)

[...] when we ask the specialized care professional to send the counter-referral, like a little letter, I have had this feedback and it helps a lot. (M XIII)

Indeed, weaknesses pointed out in the counter-referral flow compromise the resolvability of the PHC, and can induce the breaking of the bond and trust of the user in the eSF.

Many times, I just need him to close the diagnosis. I have several examples that if there had been a counter-referral, the result in the treatment would have been much more resolute [...]. (M XIII)

[...] comes down to counter-referral. The patient disappears and does not reach a final outcome. Then we have to start from scratch. Refer again [...]. (M VII)

Because if there is no resolution, the patient does not come back. They don't believe much anymore and if the problem is not resolved... (M IV)

Furthermore, FHS physicians indicate the absence of spaces for agreement and collective construction of flows in the care network, in which they can participate in debates and propose strategies to strengthen the coordination of care.

The purpose of specialty care with primary care is not happening. [...] If we are not getting feedback to keep doing the proper follow-up, it becomes very difficult. It's bad for both sides. The great difficulty is debating about all this. (M II)

Resolvability in primary health care: pointing out ways

This dimension addresses how physicians seek to overcome the challenges arising from fragility in the counter-referral flow, with a view to ensuring resolvability and quality of care in PHC. To this end, they assume the commitment to expand their ability to respond to the health needs of users, as evidenced in the statements below.

I try to solve as much as possible... [...] Then I prefer to keep trying. Most of the time, we keep asking ourselves: now, how will I do it? I already refer a patient because I had doubts. (M VI)

The specialist and the system (referring to the SUS) are thinking about numbers, and what we are doing here is thinking about quality. (M IV)

Thus, when realizing the weaknesses inherent to coordination, expressed in the data from the regulation center, as well as in the focus group discussion, they pointed out suggestions with a view to improving the processes of coordination of care and, thus, expanding the resolvability of PHC, among which stand out:

qualify PHC referrals through the appropriate filling, including clinical justification and diagnostic hypothesis; creation of clinical protocols for referrals; the creation of a WhatsApp group for PHC physicians, a regulation and management center; articulation with Telessaúde with a tool for a second opinion. (Field diary)

Discussion

The results of this study show aspects related to health regulation, from the perspective of eSF doctors. The need for diagnostic support for PHC professionals is relevant, expressed in the major demand for specialty tests. As for specialized consultations, otorhinolaryngology has a greater number of referred users, as well as waiting in the queue. It is noted that the incompleteness of the information in the referral forms, particularly the absence of a diagnostic hypothesis, contributes to the increase in the waiting time at the regulation center. Furthermore, the absence of an effective counter-referral flow, in addition to communication difficulties, compromise the continuity of care and the resolvability of PHC. Therefore, there are technical and operational challenges that make it difficult for users to access medium-complexity services in the SUS, such as weaknesses in the coordination and continuity of care.

With regard to scheduling appointments, findings similar to those of this study were found in the municipality of Minas Gerais, where otorhinolaryngology was also the medical specialty with the highest demand, which denotes that, diseases of the ears, nose and throat represent an important demand for care in PHC (Vieira, Lima, & Gazzinelli, 2015). It should also be added that otorhinolaryngology and orthopedics are part of the group of specialties with the highest number of repressed demands, in cities such as Recife (Albuquerque, Lima, Costa, & Melo Filho, 2013). However, in Rio de Janeiro, ophthalmology and cardiology have the greatest demand (Pinto et al, 2017). In São Paulo, cardiology and orthopedics were mentioned as specialties that are difficult to access in the regulation center (Spedo et al., 2010).

It is argued that the quantity, as well as the medical specialty requested in referrals to specialty care, is related to medical training, constituting a dimension that reflects the resolvability of PHC. Thus, in a study carried out in Florianópolis (Rebolho et al., 2021), it was identified that physicians with residency in Family and Community Medicine, working in PHC, significantly reduced the number of referrals to specialty care, when compared to physicians without this training, with the greatest demand for ophthalmology. Based on this finding, it was pointed out that these professionals improve the quality of care for people with chronic diseases, such as diabetes and hypertension, seeking to assess and/or prevent the complications of these diseases. Nevertheless, it seems pertinent to consider that in addition to professional training, the local epidemiological profile can also be decisive in shaping the demand for specialized care.

Regarding the tests, it was found that the echocardiogram has a great demand with a waiting time of more than 150 days. When analyzing the demand for tests, such as CT scans, the largest proportion is performed within 30 days. Ultrasonography, on the other hand, has a waiting time depending on the type, in the case of abdominal/pelvic, most exams are performed within 90 days; however, the breast CT, for the most part, is performed after 90 days. Overall, the waiting time seems long. In this context, a waiting list for specialized tests was also observed in other Brazilian municipalities (Pinto et al., 2017; Souza, Frias, & Carneiro Júnior, 2019; Bastos et al., 2020), with differences in the variation of the waiting time. Thus, in Rio de Janeiro, the waiting time at the regulation center was on average 72 days (Pinto et al., 2017). Nevertheless, in São Paulo, the minimum waiting time for tests, including ultrasounds and CT scans, was more than 180 days (Souza et al., 2019).

In this study, physicians sought to meet the demands and respond to the health needs of users, with a view to expanding the resolvability of PHC. In this context, they sometimes need diagnostic and/or therapeutic support from specialty care, through consultations and/or exams, which requires referral so that access is made possible by the regulation center. However, although physicians recognize the importance of properly completing the referral form, as an instrument to regulate access, it was identified that they do not always enter all the necessary information, since a small portion did not contain the clinical justification and, in the vast majority, there is no diagnostic hypothesis. Such a situation can generate obstacles in the regulation, in addition to increasing the waiting time and compromising the user access to specialized care, representing challenges to be overcome in the municipality.

Similar challenges, within the scope of SUS regulation, were found in São Paulo, where the low quality of referrals, long waiting time, compromised the health system resolution (Spedo et al., 2010). In Belém, incomplete information was also found on the user clinical condition, which can generate unnecessary demands, in addition to overloading specialty care services (Bastos et al., 2020).

The fact that, in this study, almost all consultations and/or exams are carried out within the scope of the health region, may be the result of the investment in strengthening the health regionalization process that took place in the state of Ceará, with the organization of care networks and, particularly, with the implementation of Regional Polyclinics, managed through a public consortium involving the state and

municipalities, according to the Specialized Assistance Coverage Expansion Program implemented in all Ceará health regions (Silva, Nogueira, & Santana, 2014). In this context, PHC is responsible for user entry into the system, in an orderly and rational manner.

The eSF physicians signal the adoption of communication strategies with the regulation center and/or reference service, which range from a detailed description of the clinical justification to the insertion of the terms “urgent” or “on request” in the referrals, with a view to guiding the order of priority of users on the waiting list, but mainly due to the fact that the professional working in the municipal regulation center is not a regulatory physician. However, despite recognizing regulation as a tool for coordinating care and the need for rationalization, they carry out apparently unnecessary referrals, which can increase the queue and, consequently, the waiting time, as well as burden the health system. Such situations denote weaknesses resulting from the inexistence and/or non-use of clinical protocols. Another weakness found in health regulation is the lack of care flows, articulating the different services of the care network, expressed in the absence of counter-referral. Additionally, FHS doctors do not participate in the construction and agreement of flows and procedures offered in the health region. All these aspects constitute challenges due to their potential to reduce the resolvability of PHC.

According to our findings, communication between the teams and the different levels of care was also pointed out as an aspect that directly interferes with the coordination of care in the municipality of Paraíba, such as the completion of reference forms by PHC and counter-referral by specialized services. Thus, the incompleteness or absence of these health regulation instruments make it difficult to monitor users in the care network (Vaz et al., 2018). In addition, the use of terms that indicate criteria for prioritizing access to specialized care, even in cases that require immediate care, represents an alternative practice in an attempt to shorten the waiting time in the face of a scenario of insufficiencies. Such a practice can generate daily anguish in the teams of the regulation center, when they perceive themselves responsible for delimiting who will have access or not, when there are scarce resources (Gawryszewski, Oliveira, & Gomes, 2012). Therefore, comprehensiveness and continuity of care are challenges in health systems.

Nevertheless, it should also be recognized that within the scope of the health region, in which the municipality of this study is located, access to specialty care, sometimes compromised by the long waiting time for consultations and exams, can be explained by the possible increase in demand and reduced supply in some specialties, despite the expansion of coverage in the state in recent years (Silva et al., 2014). In this way, the regulation center may have difficulty scheduling procedures that go beyond the monthly limit agreed on the network. Corroborating these findings, the study carried out in Belém, which also demonstrated the existence of operational problems in the regulatory centers, both regarding communication and compliance with the agreement between the municipalities, with regard to the contracting of actions and services on account, via Integrated Agreed Programming (PPI), whose quantity is not always sufficient to meet the health needs of users (Bastos et al., 2020). Therefore, the regulatory center imposes the challenge of balancing the control between physical and financial limits, according to the PPI, which requires the application of risk classification criteria, prioritization of care and referral parameters (Batista, Vilarins, Lima, & Silveira, 2019).

In view of this, it is relevant that PHC professionals also know the health needs of users, as well as care flows in the health region. At the same time, it is crucial to qualify the regulatory management processes and, mainly, the expansion of the public offer of health services, with an emphasis on specialties with difficult scheduling, adjusting them to the needs of citizens, with a view to guaranteeing the timely access (Gawryszewski et al., 2012; Bastos et al., 2020).

During the focus group, the physicians, in view of the weaknesses in communication and the absence of counter-referral, which sometimes makes it difficult to define the diagnosis and the conduct to be adopted and/or clinical follow-up, showed concern about the quality of care and with the resolvability of PHC. Therefore, they recognized that when the users do not have their health problem resolved, they do not trust the team and do not return to the service, generating discontinuity of care. With a view to overcoming this problem, they pointed out strategies to be adopted both within the clinic and in the organization and management of health regulation, including all the therapeutic possibilities within their reach in PHC, the creation of social media groups to facilitate communication between professionals and between them and the coordination of the regulation center, adherence to Telessaúde and, above all, the creation and adoption of clinical protocols with a view to qualifying referrals.

Such propositions are similar to those pointed out for the municipality of São Paulo, where the need for qualification of PHC referrals and the elaboration/use of clinical protocols made possible through the training

of professionals was also recognized (Spedo et al., 2010). Complementarily, in Belém, the need for continuing education for health professionals was indicated, as well as the restructuring and reorganization of internal regulatory procedures (Bastos et al., 2020).

Indeed, our findings reaffirm that the regulation of the SUS is a process that is not limited to the implementation and computerization of centers for scheduling appointments and specialized exams. Therefore, referral requires a process of co-responsibility of care, on the part of managers and regulatory professionals, in which the procedures must be used effectively to clarify the diagnosis and define the most appropriate therapy, and should be indicated upon exhaustion of the requesting complexity level and accurately on request (Spedo et al., 2010). It is recognized, therefore, that the responsibility of the professional with the individual served, with the establishment of a greater commitment, results in a referral that is more adequate to the user's needs and with more information (Gawryszewski et al., 2012).

To this end, a study carried out in Londrina, state of Paraná, showed that it is necessary to create spaces for dialogue between the technicians of the regulation center and PHC professionals and other different points of the care network, in which permanent education is implemented as a strategy for the organization of resolute primary care (Baduy, Feuerwerker, Zucoli, & Borian, 2011). Thus, with the collective discussion of clinical protocols and the institution of clinical management tools, it is possible to reorganize the work processes in PHC and at the regulation center, producing care in a network, with a view to rationalizing referrals and better management of the queue.

It is also worth noting that regulation in the SUS proves to be a complex process, whose operationalization requires coordinated and articulated action by managers, regulators and professionals from different points of the care network, especially PHC, given its role as a gateway and coordinator of care in the health system. In addition to its regulatory frameworks and the contracting of services via PPI, the need to reorganize regulatory procedures is evident, with a view to guaranteeing access and the implementation of SUS principles, ensuring resolution and quality of care to health.

Conclusion

It was demonstrated that the PHC faces persistent challenges related to coordination, continuity and resolvability of care. The facing this problem requires the reorganization of regulatory processes; the construction and implementation of clinical protocols and care flows; the creation of spaces for dialogue and agreements between professionals, managers and regulators, with a view to promoting integration between PHC and services of medium and high complexity; adoption of permanent education; and, expansion of the offer of procedures guaranteed through the PPI. These measures can contribute to qualification and strengthening of the problem-solving capacity of PHC.

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