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What contributes to Primary Health Care effectiveness? Integrative literature review, 2010-2020

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Abstract *Primary Health Care (PHC) intends to rearrange services to make it more effective. Nevertheless, effectiveness in PHC is quite a challenge. This study reviews several articles regarding the effectiveness improvements in PHC between 2010 and 2020. Ninety out of 8,369 articles found in PubMed and the Virtual Health Library databases search were selected for thematic analysis using the Atlas.ti® 9.0 software. There were four categories identified: strategies for monitoring and evaluating health services, organizational arrangements, models and technologies applied to PHC. Studies concerning the sensitive conditions indicators were predominant. Institutional assessment programs, PHC as a structuring policy, appropriate workforce, measures to increase access and digital technologies showed positive effects. However, payment for performance is still controversial. The expressive number of Brazilian publications reveals the broad diffusion of PHC in the country and the concern on its performance. These findings reassure well-known aspects, but it also points to the need for a logical model to better define what is intended as effectiveness within primary health care as well as clarify the polysemy that surrounds the concept. We also suggest substituting the term "resolvability", commonly used in Brazil, for "effectiveness".*

Key words *Primary Health Care, Effectiveness*

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Introduction

Healthcare systems are a historical, economic, political and cultural setting. Although healthcare services are only part of these systems, their performance embase practices and public policies analyses[1,2].

Primary Health Care (PHC) intends to rearrange services to make it more effective[3]. Practices guided by PHC are expected to meet most of community needs enabling timely access to continued and high-quality health, with the right technologies to avoid unnecessary interventions[4,5].

However, in many countries, PHC is different from that with disparities between what individuals and communities need and the quality of services, with standardized services for a small part of the population[6-8]. In Brazil, even though there is a universal health system with PHC as a structural policy[8], we found selective practices and fragmented care[9,10].

Nevertheless, effectiveness in PHC is quite a challenge. In Brazil, the National Primary Health Care Policy (*Política Nacional de Atenção Básica* - PNAB)[8] established it as a goal and the National Health Plan 2020-2023 considered it an strategic objective "to promote the expansion of PHC services in a integrated and planned manner" to be achieved by the performance of 20 indicators[11].

Effectiveness is a complex political commitment because it depends on several demographic, epidemiological and sociocultural variables which determine health conditions. There is a wide range of needs often in adverse sociopolitical contexts which challenges the services capacities. Moreover there is a conceptual and orthographic polysemy around effectiveness ranging from a health policy goal to an evaluation tool[12]. This study presents an overview of the literature contributions about PHC effectiveness because mapping the problem is the first step towards facing it.

Methodology

This study used the integrative review[13] method and the PRISMA[14] methodology. It started with the guiding question: "what theoretical-methodological contributions are presented in scientific literature to improve PHC effectiveness?" The criteria for inclusion and exclusion, the keywords and databases for search were defined. The study included original articles from indexed journals in English, Spanish and Portuguese, published between February 2010 and February 2020, with the search words in the title and/or abstract. Review studies were excluded as well as guidelines, meetings presentations, courses, speeches and management reports.

The key words came from the Descriptors in Health Sciences (DeCS) and the Medical Subject Headings (MeSH), complemented by the Boolean operators "OR" and "AND". Due to the absence of a term to translate the exact Portuguese concept of "*resolvability*" for the international literature in evaluation, we used effectiveness with the follow key words: "*resolubilidade*"; effectiveness OR *effectividad* OR *efetividade*; primary health care OR *atención primaria de salud* OR *atenção primária à saúde*. PHC related terms such as *general practitioner* (Europe, North America), *community/local/rural health* (Asia, Africa) and *atenção básica* - AB (Brazil) were considered.

The research was done from February 1st to 4th, 2020 at PubMed® and the Virtual Health Library (BVS, in Portuguese), that includes LILACS, MEDLINE, BDENF and IBECS databases. Three reviewers performed the screening of 8,369 studies. The inclusion/exclusion criteria, removal of duplicates, reading of titles and abstracts reduced the number of studies to 1,679. From those, 191 studies were removed because their focus was cost-effectiveness and 1,375 clinical effectiveness, which did not allow inferences regarding the PHC practices and policies in general. After a complete reading of the remaining 113 articles, 23 were excluded leaving a total of 90 selected articles (Figure 1) classified by title, author, year, database, journal and place of origin of the study for thematic analysis by the Atlas.ti® software, version 9.0 (Figure 2).

To establish the analytical categories, it was considered that models are reality simplifications or idealizations to explain or systematize a phenomenon hypothetically or paradigmatically[16]. Monitoring and evaluation strategies are activities for follow-up and information analysis regarding services effects for decision-making[17]. Technologies transform a given object in the context of a labor process[18]. Organizational arrangements are ways to promote changes in the services and establish levels of care to help the supply management[19].

Results

There were studies published in all of the years analyzed, especially 2018 and 2012 (18 e 14 ar-

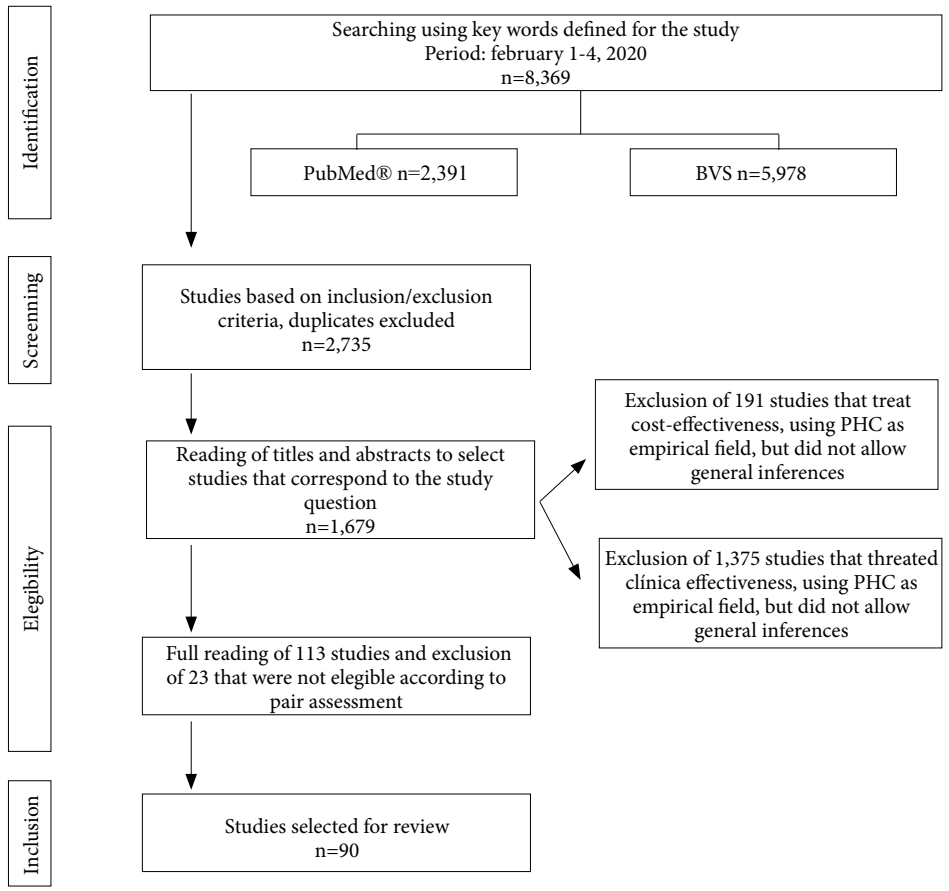

Figure 1. Methodological process for studies' selection in the integrative review.

Source: Diagram adapted from the Prisma model[15].

ticles, respectively). From the 90 articles selected, 50 were from BVS and 40 from PubMed®. Quantitative approaches were predominant (52) followed by qualitative (32) and mixed methods (06).

In terms of language, 69 of the studies were in English, 15 in Portuguese and 6 in Spanish. Concerning the place of origin, South America had 31 articles, 26 of which were from Brazil. There were 23 from Europe, 19 from North America, 6 from Asia, 4 from Africa, 3 from Oceania, and 4 conducted in more than one country. Chart 1 shows the complete list of references of the selected studies, as well as their place of origin.

There were four categories identified by thematic analysis: strategies for PHC quality monitoring and services evaluation (34 studies), organizational arrangements (25 studies), models (17 studies) and technologies applied to PHC (14 studies). Chart 2 synthesizes the main content found in these studies.

Strategies for PHC quality monitoring and services evaluation

The indicator 'Emergency/hospital admissions for PHC Sensitive Conditions' which appeared mostly in Brazilian studies, was indicated as adequate for quality evaluation with certain limitations. Emergency/hospital admissions are inversely proportional to PHC teams availability (ID 71; 74; 42; 80; 78; 16; 58; 47; 33). However, that indicator can by itself be insufficient to evaluate PHC and requires additional measures of care effectiveness (ID 10; 60). One alternative would be to choose conditions/diseases based on sensitivity and specificity instead of frequency, considering geographic and sociodemographic

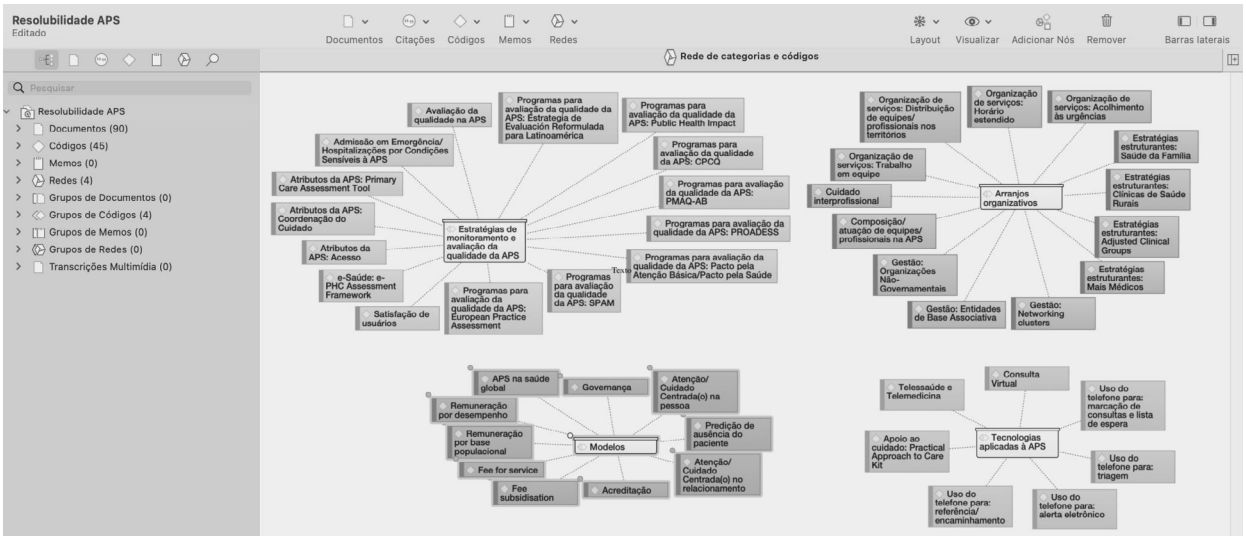

Figure 2. Network of categories and codes.

Source: Authors, using the Atlas.ti® software, version 9.0.

characteristics, model of care, labor processes and management at the health centers (ID 06).

Brazil and Argentina applied the Primary Care Assessment Tool (PCATool) (ID 32; 64) to evaluate 'PHC attributes' as a standard quality measure. South Africa applied a combination of the Nominal Group Technique (NGT) and the PCATool (ID 67) for the same purpose. In 11 countries, the Commonwealth Fund International Health Policy Survey (CFIHPS) was used to analyze care coordination (ID 54). An established relationship with a primary care physician was significantly associated with better care coordination, whereas being chronically ill or younger was associated with poorer care coordination.

"Institutional Assessment Programs" contribute to improve effectiveness. Fifty six indicators of The Swiss Primary Health Care Active Monitoring Program in Switzerland (ID 56) show a decrease in mortality. In England, 20 indicators from the pay-for-performance program of the Public Health Impact create an effectiveness score for PHC (ID 29). The European Practice Assessment in Switzerland (ID 43) points to ímprovements in quality and safety, information and finances. In Germany (ID 09), the same tool points to improvements only in quality and safety. The *Estratégia de Evaluación Reformulada para Latinoamérica* (Reformulated Evaluation Strategy for Latin America) was appropriate to evaluate performance in all of the subsystems in Argentina (ID 05). The Change Process Capability Questionnaire Strategies Score from the USA revealed heterogeneity of quality improvement strategies applied to PHC centers, making it difficult to standardize the performance evaluation (ID 72). In Brazil, the Health Services Performance Assessment Methodology (PROADESS, in Portuguese) found heterogeneity in effectiveness, access, efficiency and appropriateness subdimensions, with considerable improvements in geographic areas with PHC (ID 17). The Agreements for PHC and for Healthcare led, in general, to improvements in process and results indicators (ID 20). The National Program for Access and Quality in Primary Care (PMAQ-AB, in Portuguese) found better results in first contact and comprehensiveness attributes, and worse in longitudinal care and coordination (ID 73). There were improvements in teamwork and data management, regardless of limitations due to overload and the large amount of data to be collected. There also were difficulties to share results throughout the teams (ID 82). Performance effectiveness does not guarantee outputs and outcomes (ID 59).

Organizational arrangements

"Multidisciplinary teams" with expanded roles, new protagonists and new competencies have proven to be useful (ID 63), especially in

Chart 1. Studies selected for review.

ID	Study	Place of origin
1	Báscolo, 2010[30]	Argentina
2	Perron *et al.*, 2010[31]	Switzerland
3	Vieira-da-Silva *et al.*, 2010[32]	Brazil
4	Miller *et al.*, 2010[33]	USA
5	Yavich *et al.*, 2010[34]	Argentina
6	Nedel *et al.*, 2011[35]	Brazil
7	Sohrabi and Albalushi, 2011[36]	Iran
8	Wilson, 2011[37]	United Kingdom
9	Szecsenyi *et al.*, 2011[38]	Germany
10	Rehem *et al.*, 2012[39]	Brazil
11	Baratieri *et al.*, 2012[40]	Brazil
12	Grills *et al.*, 2012[41]	India
13	Albalushi *et al.*, 2012[42]	Oman
14	Ortiz and Wan, 2012[43]	USA
15	Alkmim *et al.*, 2012[44]	Brazil
16	Oliveira *et al.*, 2017[45]	Brazil
17	Viacava *et al.*, 2012[46]	Brazil
18	Greaves *et al.*, 2012[47]	England
19	Mold *et al.*, 2012[48]	USA
20	Lima *et al.*, 2012[49]	Brazil
21	Campo, 2012[50]	Chile
22	Sanabria and Orta, 2012[51]	Venezuela
23	Dookie and Singh, 2012[52]	South Africa
24	Kirschner *et al.*, 2012[53]	The Netherlands
25	Lavoie *et al.*, 2013[54]	Canada
26	Liddy *et al.*, 2013[55]	Canada
27	Hinchcliff *et al.*, 2013[56]	Australia
28	Keely *et al.*, 2013[57]	Canada
29	Ashworth *et al.*, 2013[58]	England
30	Heard *et al.*, 2013[59]	Bangladesh
31	Kirschner *et al.*, 2013[60]	The Netherlands
32	Chomatas *et al.*, 2013[61]	Brazil
33	Zhao *et al.*, 2013[62]	Australia
34	Violán *et al.*, 2013[63]	Spain
35	Porter *et al.*, 2013[64]	USA
36	Maini *et al.*, 2014[65]	D. Republic of Congo
37	Costa *et al.*, 2014[66]	Brazil
38	Roots and Macdonald, 2014[67]	Canada
39	Rao and Pilot, 2014[68]	United Kingdom and The Netherlands
40	Piropo and Amaral, 2015[69]	Brazil
41	Campbell *et al.*, 2015[70]	England
42	Castro *et al.*, 2015[71]	Brazil
43	Goetz *et al.*, 2015[72]	Switzerland
44	Farias *et al.*, 2015[73]	Brazil
45	Ford *et al.*, 2015[74]	England
46	Mobula *et al.*, 2015[75]	USA
47	Fung *et al.*, 2015[76]	China
48	Lemak *et al.*, 2015[77]	USA
49	Nouwens *et al.*, 2015[78]	The Netherlands
50	Markwick *et al.*, 2015[79]	USA

it continues

Chart 1. Studies selected for review.

ID	Study	Place of origin
51	Brugués *et al.*, 2016[80]	Spain
52	Whittaker *et al.*, 2016[81]	England
53	Leite *et al.*, 2016[82]	Brazil
54	Penm *et al.*, 2017[83]	Australia, Canada, France, Germany, The Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom and USA
55	Hone *et al.*, 2017[84]	Brazil
56	Ebert *et al.*, 2017[85]	Switzerland
57	Murante *et al.*, 2017[86]	Europe
58	Zarlotti *et al.*, 2017[87]	Brazil
59	Miclos *et al.*, 2017[88]	Brazil
60	Mendonça *et al.*, 2017[89]	Brazil
61	Molina *et al.*, 2017[90]	Brazil
62	Chang *et al.*, 2017[91]	USA
63	Wagner *et al.*, 2017[92]	USA
64	Segalini *et al.*, 2017[93]	Argentina
65	Wan *et al.*, 2018[94]	USA
66	Zhou *et al.*, 2018[95]	China
67	Mukiapini *et al.*, 2018[96]	South Africa
68	Pandya *et al.*, 2018[97]	United Kingdom
69	Lin *et al.*, 2018[98]	USA
70	Tintorer *et al.*, 2018[99]	Spain
71	Arantes *et al.*, 2018[100]	Brazil
72	Balasubramanian *et al.*, 2018[101]	USA
73	Lima *et al.*, 2018[102]	Brazil
74	Santos *et al.*, 2018[103]	Brazil
75	Hayhoe *et al.*, 2018[104]	England
76	Fariño Cortez *et al.*, 2018[105]	Spain
77	Lima-Toivanen and Pereira, 2018[106]	Argentina, Brazil, Costa Rica and Dominican Republic
78	Wensing *et al.*, 2018[107]	Germany
79	Cole, 2018[108]	USA
80	Abel *et al.*, 2018[109]	United Kingdom
81	Fairall *et al.*, 2018[110]	South Africa
82	Ferreira *et al.*, 2018[111]	Brazil
83	Nabelsi *et al.*, 2019[112]	Canada
84	Navathe *et al.*, 2019[113]	Hawaii
85	Lenzi *et al.*, 2019[114]	Brazil
86	Azogil-López *et al.*, 2019[115]	Spain
87	Ballart and Galais, 2019[116]	Spain
88	Sibbald *et al.*, 2019[117]	Canada
89	Harzheim *et al.*, 2019[118]	Brazil
90	Tasca *et al.*, 2020[119]	Brazil

Source: Authors.

contexts with shortage of doctors (ID 65). The implication of all professionals optimizes work and frees up others for tasks that only they can perform. Hence, a larger number of doctors at PHC improves results in health (ID 62). In a Brazilian study (ID 37), effectiveness was related to multidisciplinary teams that produce bonds of trust and autonomy at the workplace.

Nurses stand out for their effectiveness in managing demands, health education and a comprehensive range of needs. (ID 51). Their community, organizational and services performance

Chart 2. Selected studies by thematic categories and subthemes.

Thematic categories	Themes	Subthemes	Absolute number	Percentage
Strategies for PHC quality monitoring and services evaluation	General	PHC quality assessment (ID 88)	1	1.1%
	Indicators	Emergency/hospital admissions by PHC sensitive conditions (ID 71; ID 74; ID 10; ID 06; ID 42; ID80; ID 78; ID 16; ID 60; ID 58; ID 47; ID 33)	12	13.3%
	PHC Attributes	Primary Care Assessment Tool (ID 32; ID 67; ID 64); Care coordination (ID 54); Access (ID 69)	5	5.6%
	Institutional Assessment Programs	CPCQ (ID 72). SPAM (ID 56). European Practice Assessment (ID 43; ID 09). PMAQ-AB (ID 73; ID 82; ID 59). *Estrategia de Evaluación Reformulada para Latinoamérica* (ID 05). *Pacto pela Atenção Básica/Pacto pela Saúde* (ID 20). Public Health Impact (ID 29). PROADESS (ID 17)	11	12.2%
	e-Health	e-PHC Assessment Framework (ID 77)	1	1.1%
	User's satisfaction	User's satisfaction (ID 07; ID 13; ID 76; ID 19)	4	4.5%
Subtotal			34	37.8%
Models	General	PHC in Global Health (ID 39)	1	1.1%
		Governability (ID 01)	1	1.1%
	Payment	For populational basis (ID 84; ID 57)	2	2.3%
		For performance (ID 68; ID 24; ID 31)	3	3.3%
		Fee-for-service (ID 48; ID 79), fee subsidies (ID 36)	3	3.3%
	Accreditation	Accreditation (ID 27; ID 49; ID 08)	3	3.3%
	Models of Care	Care approach centered on: person (ID 35; ID 25); relationship (ID 04)	3	3.3%
		Patient no-show predictive model (ID 85)	1	1.1%
Subtotal category			17	18.9%
Organizational arrangements	Multidisciplinary teams	Team set-up/practices (ID 63; ID 65; ID 62; ID 51; ID 38; ID 11; ID 75)	7	7.8%
	Services organization	Extended hours (ID 52; ID 45), Team work (ID 46; ID 37), Distribution of teams/professionals (ID 66; ID 18; ID 23); urgencies (ID 44)	8	8.9%
	Structuring strategies	Family health (ID 90; ID 53; ID 55; ID 21), Rural Health Clinics (ID 14), More Doctors (ID 61), Adjusted Clinical Groups (ID 34)	7	7.8%
	Management	Non-governmental organizations (ID 30); Associative Basis Entities (ID 87); and Networking clusters (ID 12)	3	3.3%
Subtotal category			25	27.8%
Technologies applied to PHC	Digital	Telehealth and Telemedicine (ID 70; ID 40; ID 15; ID 50; ID 22; ID 89)	6	6.7%
		Virtual Appointments (ID 83; ID 26; ID 28)	3	3.3%
		Use of telephone for: scheduling appointments and waiting list (ID 03); reference/referral (ID 86); screening (ID 41); and electronic alert (ID 02)	4	4.5%
	Non-digital	Support to care: Practical Approach to Care Kit (ID 81)	1	1.1%
Subtotal category			14	15.5%
Total			90	100%

Source: Authors.

is highlighted, improving access and the use of other levels of care, as well as doctor's acceptance of nurses' clinical competence**.** (ID 38). Longitudinal care at nurses' work was also related to improvements in population's quality of life and in effectiveness within PHC (ID 11).

One study from England (ID 75) suggests that including Community Health Agents on a national scale is recommended/advisable and it can be fastly implemented to help relieve work overload within healthcare services (ID 75). In the USA, teams recognized PHC Community Health Agents effectiveness in solving problems (ID 46).

Concerning "Services organization", extended hours at night and/or weekends reduced the use at other levels of care in the first 12 months (ID 52), with possible benefits for young patients who work full time (ID 45).

"Rural Health Clinics" experience in the USA (ID 14) revealed that larger clinics are more efficient, suggesting that smaller ones should gather integrated systems or districts (ID 23). In England, the size of PHC units was not decisive for the teams performance and the variance can be explained by population characteristics. Organizational arrangements focused on responsibilities and not merely on the size of population are recommended (ID 18).

The Family Health Strategy in Brazil (ESF, in Portuguese) stands out amongst "Structuring strategies": wide health services supply and comprehensiveness (ID 53), PHC expansion and strong governance were associated with a decrease in preventable mortality (ID 55). It was considered the best strategy for a strong PHC, when associated with policies that reinforce its attributes with innovations in management of care and communication technologies (ID 90). However, poor diagnostic and therapeutic supply are still challenges for effectiveness and user's satisfaction (ID 53).

Models

The "Models" category grouped frameworks to increase effectiveness, predominating those concerning the influence of payment in PHC quality. Payment for population basis in Hawaii (ID 84) resulted in reduction of appointments demand, with no significant increase in costs. An European study (ID 57) concluded higher PHC responsiveness happens when doctors are paid by capitation than when they only receive fee-for-services or a mixed payment method.

"Payment for performance", according to studies from the Netherlands and United Kingdom (ID 24; 31), may improve clinical quality, patients' experience and care organization. But proved not to be cost effective in another study from the United Kingdom (ID 68), which recommended a redesign of the program or alternative interventions.

Regarding "fee-for-service", studies from the USA (ID 48; 79) on a model of direct Primary Care concluded that fees improved PHC attributes. Lining up payment with cost and performance encouraged professionals to provide the best quality care. One program of population-based subsidies for service fees ("fee subsidies") in the Democratic Republic of Congo (ID 36) proved to increase the use of services in the short term and point to the need to study its sustainability, long-term effects and the possibility of removing or reducing fees for vulnerable users.

Technologies applied to PHC

Digital technologies stood out as means through which to increase effectiveness, especially with "Telehealth and Telemedicine" services. These are tools that provide reliable, updated and easily transferable information to clinical activities. Their value is for educational capacity and for expanding access and quality with reductions in cost. They also prevent unnecessary displacements and crowding at the reference centers, reducing hospitalization, strengthening integration between services and satisfaction for professionals and patients (ID 70; 40; 15; 50; 22; 89).

"Virtual consultations", according to data from Canada (ID 83; 26; 28), were efficient in improving access to specialized care, besides being well accepted by professionals and patients. It can reduce waiting time, as well as the use of telephone to schedule appointments and to organize waiting lists (ID 03), referrals (ID 86), screening (ID 41), and electronic alerts to diminish patient no-show (ID 02).

Discussion

The main contributions to improve effectiveness in PHC were: sensitive conditions indicators, institutional assessment programs, focus on PHC as a structuring policy, quantitatively (number of doctors) and qualitatively appropriate workforces (multidisciplinary teams, nursing, community health agents), organizational measures to in-

crease centers' availability and the use of digital technologies.

However, it's important to consider some aspects concerning the validity of this review. The choice of the keywords and the articles profile may have minimized relevant themes. That was the case of PHC coordination and integration with other levels of the system, in which access to specialized care and the waiting lists are one of the most important hurdles in PHC universal systems[20]. Although contemplated in the category 'digital technologies' and in the results from PMAQ and CFIHPS, there were few papers about this issue. There is also a lack of information on PHC reforms in countries such as Portugal[21], especially concerning incentives to improve performance, which may have been published in reports or books.

The option to present the most frequent results in each category was also a relevant aspect, which may have prevented exploring less frequent ones, yet equally important themes. That is the case of "user's satisfaction" in studies from Iran, Oman and Ecuador (ID 07; 13; 76), "accreditation" in Australia, the Netherlands and the United Kingdom (ID 27; 49; 08), models geared towards care approach centered on the person and on "the relationship" (ID 35; 25), and non-virtual technologies in "support to care" (ID 81). To minimize such limitations, Charts 1 and 2 enable access to the entire set of analyzed studies.

An expressive number of Brazilian studies showed indicators of emergency/hospital admissions due to PHC sensitive conditions, calling attention to the fact that other factors interfere in its effectiveness. This indicator is recommended for health care network evaluation, since it indicates possible problems concerning access and quality at all levels of care (ID 71; 74; 47). To better evaluate the PHC performance, a more comprehensive framework is needed to integrate questions at the macro level (policies) with the meso (management) and micro-social level (care)[20].

Besides these conceptual challenges, instruments and mechanisms which aim to apply PHC sensitive conditions must be operational and sustainable. They should consider data sub-registers and those from private services. Methodological and contextual differences also make comparisons more difficult. Many countries do not apply a wide concept for effectiveness as a desirable outcome for PHC universal systems, with effectiveness measures based on selective services, defined by guidelines and financial costs[7].

Payment for performance approaches have increased in recent decades along with reforms in PHC services[22], but their effects must be discussed further. Studies in Brazil (ID 73; 82; 59) and in the Netherlands (ID 68; 24; 31) suggest positive results. However, the experience in the United Kingdom with the Quality and Outcomes Framework proved not to be cost-effective (ID 29; 68) since payment rewards were not in line with health incomes, in this case focusing on mortality rather than PHC attributes. A recent study concerning the Brazilian PMAQ points out the capability to improve access and quality, even so indirect professionals remuneration depended on a complex evaluative model and certification process[10].

The present study confirms the polysemy of 'resolvability', concept embraced in Brazil, associated with the idea that most of the demands could be solved by PHC without referral to other services[4,23]. This concept isn't the same in English (effectiveness or responsiveness*),* nor in Spanish (*modelo resolutivo* or *capacidad resolutiva).* Effectiveness evaluate the level at which services reach the expected results in common practical conditions, or the relationship between its potential and real impact, which is closely related to results and classic PHC attributes (ID17)[24,25]. Responsiveness is the capacity to respond and the system fundamental objective of anticipating and adapting to existing and future needs for better results in health care. It focuses on individuals' experiences and on how the health systems meet expectations, concerning: dignity, autonomy, confidentiality, immediate care, facilities quality, access to social support networks and service providers choice[26]. These concepts are close to the way 'resolvability' has been understood in Brazil, all of which related to the evaluation field. Although, a clearer differentiation is needed in order to facilitate an adequate use.

"Resolvability" according to Brazil's common use corresponds to the act of establishing effective solutions for health problems, with beneficial results in individual or collective problems[27-29]. Implies the possibility of identifying community needs, which will not necessarily appear as demands. This is where the challenge of this concept lies: identifying outcomes which may be expected in this level of care, taking into account the system's conditioning factors, as well as the socioeconomic and cultural determinants that influence health in general.

Final considerations

The expressive number of Brazilian publications shows the important diffusion of PHC in this country over the last decade, as well as the concern with its performance. The scope reinforces already well-known aspects: a positive induction of institutional evaluation, organizational arrangements to improve institutional capacity and services availability, quantitatively and qualitatively appropriate workforces, PHC as a structuring policy and the use of digital resources. However payment for performance is still controversial. Complementary studies are warranted in order to overcome the thematic limitations or the bias of the present study.

The polysemy that surrounds the concept "resolvability" in Brazil proves the need for greater clarity in its application, identifying what is intended as effectiveness within PHC. Therefore, a logical model should be considered, with parameters which contemplate determinants and conditioning that influence PHC. We also suggest substituting the word "*resolvability*" as used in Brazil for 'effectiveness to facilitate an international dialogue concerning outcomes in evaluation.

Collaborations

ACC Chaves and MDA Scherer contributed substantially to its conception and design. All authors, ACC Chaves, MDA Scherer and EM Conill, contributed substantially to the analysis and interpretation of data, writing of the article, critical review of the content and approval of the final version to be published.

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