

# Descriptor Flowchart of the work process: tool to strengthen Primary Health Care

## *Fluxograma Descritor do processo de trabalho: ferramenta para fortalecer a Atenção Primária à Saúde*

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**ABSTRACT** The Descriptor Flowchart is characterized by the cartographic elaboration of dynamic processes of daily life and can be configured as an important management tool. It is proposed to report the authors' experience regarding the teaching of the Descriptor Flowchart, and the monitoring of students (managers and coordinators of primary care) in the application of this tool to their work teams, during an Improvement Course in Management of Basic Health Units, Clinical Management and Care in the Distance Education modality. Descriptive study, of the experience report type, an analysis of the reports was carried out, classified as: Stage I – Approach/Learning of the Descriptor Flowchart; and Stage II – Application of the Descriptor/Activity 1 Flowchart in the Virtual Learning Environment. Considering Step I, it was noticed that the discussions generated several reflections and concerns, from the moment they observed the critical nodes that the work process may present. In Step II, it was noted that the flowchart can develop a more efficient work, as it allowed the identification of user needs and the participation of all team members. Thus, this tool deserves to be disseminated in health services, once, besides corroborating the organization of services, it contributes to a reflection the work process.

**KEYWORDS** Primary Health Care. Health management. Organization and administration.

**RESUMO** O Fluxograma Descritor é caracterizado pela elaboração cartográfica de processos dinâmicos do cotidiano e configura uma importante ferramenta de gestão. Propõe-se relatar a experiência dos autores, quanto ao ensino do Fluxograma Descritor, e ao acompanhamento dos alunos (gerentes e coordenadores de atenção básica) na aplicação dessa ferramenta nas equipes de trabalho, durante um Curso de Aperfeiçoamento em Gerência de Unidades Básicas de Saúde, Gestão da Clínica e do Cuidado, na modalidade Ensino a Distância. Estudo descritivo, do tipo relato de experiência, realizou-se uma análise dos relatos, classificada em: Etapa I – Aproximação/Aprendizagem do Fluxograma Descritor; e Etapa II – Aplicação do Fluxograma Descritor/Atividade 1 no Ambiente Virtual de Aprendizagem. Considerando a Etapa I, percebeu-se que as discussões geraram várias reflexões e inquietações, a partir do momento que observaram os nós críticos no processo de trabalho. Já na Etapa II, observou-se o reconhecimento do fluxograma para desenvolver um trabalho mais eficiente, pois permite a identificação das necessidades do usuário e a participação de toda equipe. Assim, essa ferramenta merece ser divulgada nos serviços de saúde, uma vez que, além de corroborar na organização dos serviços, contribui para uma reflexão do processo de trabalho.

**PALAVRAS-CHAVE** Atenção Primária à Saúde. Gestão em saúde. Organização e administração.

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## Introduction

Thinking of new proposals for health actions is a way to legitimize the performance of the Unified Health System, going beyond its regulation through Organic Health Law n° 8080 and Complementary Law n° 8.142, which leads us to evaluate the hygienist model, medicalizing and hegemonic, thus, building a differentiated view of health action, in a plural and equanimous manner, in order to adhere to the current proposals for strengthening and organizing services in Primary Health Care (PHC)<sup>1</sup>.

It is considered that 'health care' is also based on changing the forms of production of health care with emphasis on health promotion, that is, from the surveillance of this care and the replacement of the hegemonic medical model, characterized by the realization of technical procedures that hinder multiprofessional work<sup>2</sup>.

The organization of health services is an indispensable measure for clinical and care management. For such an organization, it is necessary to use various technologies and strategies that corroborate improvements in access to services and management of the work process. Above all, which result in improvements in health indicators, as they are the PHC<sup>3</sup> thermometer. It is in this sense that PHC requires great effort on the part of its managers, from the management of care in care, performed in the Basic Health Units (BHU), to the management at the national level, for health care networks to function in a congruent way, giving capilarity in care and, consequently, seeking to ensure integral and universal care<sup>4</sup>.

From this perspective, we intend to report the experience of using the Descriptor Flowchart (DF) as a strategy to strengthen PHC. It is a tool based on the elaboration of cartography about dynamic processes of daily life<sup>5</sup>, which aims to:

[...] trace workflows and processes, using a graphical representation, enabling: understanding, identification of critical nodes, planning and reorganization of the work process<sup>6(2)</sup>.

As every work process must be constantly changing, the DF also has no end in itself, because it causes the analysis of the care provided by the health professional. This is because documenting activity flow makes it possible to make improvements and better clarify the workflow itself through the following advantages: it improves understanding of the work process, shows the steps required to get the job done, creates standard norms for the execution of processes, demonstrates the sequence and interaction between activities and projects, can be used to find process failures, can be used as a source of information for critical analysis and facilitates consultation and cases of questions about the process<sup>7</sup>.

The DF consists of the construction of a work process diagram, of a certain sector or service, and uses some universally standardized symbols, such as: 1) The drawing of an ellipse, representing the entrance or the beginning of a certain flow, as well as its end; 2) The rectangle, such as the stage of stock production or resource consumption and product production; 3) The rhombus, to represent moments of choice and possibilities of referrals to be followed<sup>8</sup>.

It is noteworthy that, at the moment of its elaboration, it is up to the professionals involved in the process of constructing the DF the orientation, the monitoring and the subsequent graphic assembly of the tools, their detailing and their analysis<sup>9</sup>.

The use of the DF in the work process, as a management tool, is largely justified by the new look that deconstructs the care model centered on the doctor's knowledge and figure. Thus, care becomes the result of a collective work process that involves,

among other perspectives, exchange relations, inter, intra and multiprofessional communication<sup>10</sup>, that is,

[...] a new configuration with emphasis on multiprofessional teamwork, bonding and accountability of the therapeutic process, greater accountability of family and community and whose effectiveness has had great repercussion<sup>11(123)</sup>.

Another important point regarding the DF in PHC is the intersectoriality, because,

It is linked to the conception of integration, articulation of knowledge and services, as well as the formation of partnerships between collective spheres in meeting the needs of individuals, emerging as an integrated management method for addressing social problems with the maintenance of autonomy of each sector involved in the process<sup>6(1)</sup>.

In addition to using DF, it is also important to know how people act to produce autonomy and perception of their own work processes. The process of knowing how to act as a way of doing and thinking health of a particular sector or service is fundamental to reflect management mechanisms capable of changing its care model<sup>11</sup>. Using, thus, the autonomy of health professionals for a process of reflection and construction in health.

In this sense, valuing knowing how to act presents itself as a possibility to reconcile the necessary autonomy for health professionals<sup>11</sup>. Thus, it is also perceived the importance of reviewing the work processes within the institutions, in search of new techno-care configurations in health<sup>5</sup>.

Thus, this article aims to report the authors' experience regarding the teaching of DF as a management tool, and the follow-up of students (BHU managers and municipal primary care coordinators) in applying the flowchart to their teams at

BHU, during an Improvement Course in Management of Basic Health Units, Clinical and Care Management, in the Distance Learning modality (DL).

## Methodology

This is a descriptive study, of the experience report type, linked to the teaching of the DF as a management tool and its application by students (BHU managers and municipal primary care coordinators) of an Improvement Course in Management of Basic Health Units, Clinical and Care Management, developed by the Fluminense Federal University, DL modality, in partnership with the Ministry of Health, from November 2018 to February 2019, in Macapá, State of Amapá.

The class was composed of a total of 24 students, 15 managers of Basic Units and 9 coordinators of primary care, from the municipalities of the self-reported state, and 19 of them were from Macapá; 2 by Ferreira Gomes; 1 from Porto Gomes; 1 from Pedra Branca do Amapari and 1 from Calçoene.

The course was semi-presential and lasted six months. It was organized in three Units of Learning (UL), so that each unit started with a presential moment in the city of Macapá.

The first UL, called 'Health Work Process Management', with a workload of 77 hours, focused on the discussion of the DF.

Subsequently, the second UL, 'Health Care Materials Management', with a workload of 21 hours, presented the objective of implanting and implementing materials management, programming and inventory management of consumable goods.

While the third UL, 'Network, care lines and participatory planning management', with a workload of 70 hours, addressed the following topics: Health Care Network, Care Line, Single Therapeutic Project, Regulation and Health Planning.

All UL were supported by a tutor and the use of a Virtual Learning Environment (VLE). At each present moment, at least one management tool was presented and discussed, so that in the distance stage, with the support of the e-book and the discussions in the forums available in the VLE, students could apply them to their teams, in the context of the BHU to which they were linked; among them, the article highlights the application of DF.

For the development of this article, an analysis was made of all reports of students referring to the DF, classified as: Stage I – Approach/Learning of the DF – it was considered the presential moment with discussions; the activities carried out in the first UL and the forums and Stage II – Application of the DF/Activity 1 in the VLE – it was considered the experiences of applying the tool in their BHU teams, which were posted in the VLE as activity 1.

## Results and discussion

### Stage I: Approximation/Learning of the DF

It was noticed that the discussions about the DF, in the face-to-face meeting, in the activities of the first UL and forums, generated in the students several reflections and some questions, as well as concerns that arose from the moment they started to observe the critical nodes of the whole process, based on an exposed case report. They could observe where there were failures and sought to solve the problem through team discussions, not only thinking about those responsible, but the problems that occurred within their own space in the unit, caused by lack of communication or lack of understanding of the work process, as well as lack of structure and unwillingness to understand how unit managers

should try to organize all these situations in their team.

In the meantime, it was emphasized that most of the previous experiences did not include the participation of the BHU team in the construction or organization of work flowcharts, and that this task was commonly performed by the team of professionals working at the central level of the Municipal Health Secretariat and passed on to health facilities.

This moment caused, in most students, the need to highlight the construction and operation of flowcharts as one of the first stages of organization in the work process within health services. They understood that it is not enough for the team to have its routine organized, but rather that it is necessary to graphically represent the entire work process, as this clarifies the work process itself, not only for the team, but also, for the user.

In this sense, they recognized the DF as a tool that aims to improve the attention to the user, since, through it, they observed that it is visible and understandable how the work of several areas within a health service should flow, so that the user does not get 'lost' or don't know where to go, or who to look for, and especially what their rights and duties are.

It was also observed that some of them expressed some difficulty with the use of symbols for the construction of the DF, because they did not know what each symbol (ellipse, rhombus and rectangle) of the flowchart represented, not even that they could not and should not be placed at random. Moreover, they demonstrated difficulties regarding the careful analysis to be performed to list the critical nodes, during the description of the clinical case.

For the students, the experience of the elaboration of the DF allowed a deep reflection about the work process, mobilization of management and assistance tools. Before elaborating, they imagined to be something

simpler, but during the execution of the activity, they realized that it was something complex, which requires a workshop with the participation of the team, since it is a collective action. After the activity, they explained that they left with the feeling that it is necessary to know the work of team members and to strive for an organized service that takes into account the needs of the user.

It was possible to observe reports such as:

*I think I will have many difficulties to build the flowcharts of services at the BHU I work; perform diagnosis of care flow; analyze the activities performed by each professional category that makes up the team; propose new service flow; diagnose the difficulties and complaints of professionals regarding the reception; identify the conceptions of the service professionals about the act of welcoming the user; conduct discussion groups with the team to find possible solutions for the organization of the service flow; guide the population about the existence and difference between FHS and BHU; implement the new organization of the service, using various ways to disseminate the activities provided in order to keep the population informed.*

## Stage II: Application of DF/Activity 1 at VLE

According to the students' reports on the VLE platform, the construction of the DF was very important, they said they realize that, through this tool, it is possible to better analyze the work process. Furthermore, the flowchart showed how they can develop their work more efficiently, allowing a greater connection with the user's needs, as well as providing a self-analysis of the work done, punctuating the difficulties and finding solutions to the problems presented.

The construction of the DF *in loco* in the municipalities of the state of Amapá by students, proved to be an experience for the

teams and sectors, as they were able to share with all the critical nodes that each sector faced on a daily basis and that directly influenced the course of the work process of the whole team. The central idea of building the DF with the whole team, identifying the 'nodes' that happen in everyday life and weaving strategies so that the service is not compromised, favors the user to leave the establishment satisfied.

The exercise of activity 1 in the territory provoked a discussion among the team about the case, identifying the problematic factors that did not provide the professionals with a moment of coexistence and group affinity. They were previously perceived which could be worked on and improved to achieve better results. Thus, the students understood that it is essential that the elaboration of the flowchart, regardless of its purpose, be performed with the participation of all team members, because, at this moment, the multiplicity of knowledge undoubtedly enriches the result.

Thus, it is noteworthy that the DF not only represents a cartographic instrument of the work process, it also assists in the search for user-centered assistance, in addition to enabling "systematic evaluation and optimization of work"<sup>12(36)</sup>, enabling the strengthening of the consolidation of the principles recommended in the National Policy of Primary Care, among them, resoluteness and comprehensiveness<sup>13</sup>.

Analyzing tools are self-pedagogical analysis processes. Through them, the practice and its knowledge is accumulated and systematized, as the actors critically appropriate the reality of which they are part and over which they intervene. Therefore, they need to be done by the collective. This shows the need to build tools and empower health professionals, exchange and perceptions of access to health, a critical and social view of the reality of their territory<sup>2</sup>.

The process of collective construction, besides presenting a rich product, permeated by multiple knowledge, has the effect

of forming an opinion among workers about reality, an awareness in the team of the problems faced by the user, as a consequence of the organization of the work process. The group has produced a conscious organization of its thinking that gives it the real dimension of how health actions are produced, which is often not perceived by workers, given a certain compartmentalization and even an “automation” of the work<sup>5(4)</sup>.

In this sense, the idea that the DF does not stop at an individual construction is reinforced, since it is the professionals who have knowledge that identifies the problems and needs of those who access the service. “The flowchart must, therefore, be made collectively, based on data produced with access to different sources”<sup>14(17)</sup>.

It is noteworthy that the execution of the work process, when applied with interaction and comprehensiveness among all involved, enhances the improvement of the health care line offered to the user<sup>15</sup>. It is pointed out that:

In any care approach of the health worker, there is a process of relationships through live work in action. In this encounter of expectations and productions, intersubjective moments are created, such as speeches, listening and interpretations, which may or may not have a reception of the intentions of the people involved and resulting in moments of complicity and production of accountability of the problem to be faced<sup>16(1828)</sup>.

It is also important to highlight that

a description of intra and interinstitutional relations, where the estrangements and conflicts between the various actors in the scenario are revealed [...] reveal the various projects that exist in the decision arena<sup>2(2)</sup>.

A ‘care producer’ model, centered on the user and their needs, should operate centrally from light technologies (those inscribed in relationships at the time health acts are

performed) and light/hard technologies (those inscribed structured technical knowledge), this model is permeated by pain, suffering, health knowledge, life experiences, care practices and subjectivities that affect worker-user subjects. Finally, there is a complex world that involves, above all, the production of care<sup>8</sup>.

The analysis carried out, using the DF tool of the care model, revealed the entire work process in health actions and services, mapping the entire flow of users across all levels of health care, and identifying the interventions, possible potentialities and weaknesses<sup>17</sup>.

Moreover, it demonstrates that health problems, in general, are complex, because they involve countless dimensions of life, ranging from those that are limited to the body to those of a social and subjective nature. Health work, in turn, to be effective, must respond to this complexity and make sense of interventions in various fields of health. This opens up a range of possibilities for using the various work technologies to produce care.

Thus, the DF allows the identification of critical nodes and allows a deep reflection that can instruct the worker in managing his/her own process. Thus, the experience of creating a DF becomes a moment of planning several rationally thought out actions in an elaborate sequence, allowing an analysis of the actions and agents involved, and this is not always an easy experience, the sensation is that exhausting the conditions and limits of this service is difficult to achieve due to the many possible consequences of this process.

## Final considerations

Given the above, it can be considered that this tool deserves to be widely disseminated in the various health services in the Country, because besides corroborating the organization of services, contributes to the self-assessment and reflection of professionals about their potentialities and weaknesses, thus, enabling rethinking and reframing the

work process, which can result in gain for users, servers and service.

A well-designed DF, feasible with local reality, strengthens the bond and trust with the team, optimizes time and, above all, establishes more resolute actions and increases user satisfaction. In general, the reported experience allowed those involved to show that the use of this tool can provide professionals with a moment of coexistence and group affinity; the perception of the need to know the work of team members; consider user needs and look for a more efficient work process. The DF becomes a democratic tool that allows the participation of various agents in care<sup>2</sup>.

Furthermore, it is pointed out that this tool should be taken as an offer, a possible starting point in a strategy of visualization and organization of collective work at BHU, and should be adapted whenever necessary, considering

the uniqueness of each place, facilitating access, qualified listening and meeting health needs, as well as the knowledge acquired in the exchange of experiences between the team.

## Collaborators

Rodrigues RP (0000-0002-5445-9402)\* contributed substantially to the design and planning; and to the analysis and interpretation of the data. Carmo WLN (0000-0002-6892-7502)\* contributed significantly to the drafting and critical review of the content. Canto CIB (0000-0003-4995-3972)\* contributed significantly to the drafting and critical review of the content. Santos ESS (0000-0002-9796-824X)\* and Vasconcelos LA (0000-0002-5771-9724)\* participated in the approval of the final version of the manuscript. ■

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