REUFSM
REVISTA DE ENFERMAGEM DA UFSM

UFSM
Rev. Enferm. UFSM - REUFSM
Santa Maria, RS, v. 10, e14, p. 1-13, 2020
DOI: 10.5902/2179769236832
ISSN 2179-7692

Reflection Article Submission: 14/02/2019 Approval: 13/11/2019 Publication: 29/01/2020

Health care networks: a strategy for health systems integration

Redes de atenção à saúde: uma estratégia para integração dos sistemas de saúde

Redes de Atención de salud: una estrategia para la integración de los sistemas de salud

Adalvane Nobres Damaceno[I], Maria Alice Dias da Silva Lima[II], Vanessa Rodrigues Pucci[III], Teresinha Heck Weiller[IV]

Abstract: Objective: to discuss and reflect on Health Care Networks, their theoretical concepts and legal frameworks in health policies. **Method:** a reflective theoretical study, based on the scientific literature on theoretical concepts and legal frameworks of Health Care Networks. **Results:** the integration of health services is a response to the fragmentation of care, and has a multiplicity of concepts, principles and dimensions. Health Care Networks are revealed as a strategy for the integration of services and are an alternative in the qualification of care. National and international experiences indicate that networked care ensures greater effectiveness of health actions with multiple care based on a systemic integration. **Conclusions:** the conformation of Health Care Networks contributes to overcoming the vertical model. The structuring is based on the epidemiological profile and contributes to improving the care provided, overcoming care gaps and reducing costs.
Descriptors: Primary Health Care; Systems Integration; Health Services Coverage; Delivery of Health Care, Integrated

Resumo: Objetivo: discutir e refletir sobre as Redes de Atenção à Saúde, seus conceitos teóricos e marcos legais nas políticas de saúde. **Método:** estudo teórico reflexivo, baseado na literatura científica sobre conceitos teóricos e marcos legais das Redes de Atenção à Saúde. **Resultados:** a integração dos serviços de saúde é uma resposta à fragmentação do cuidado e possui multiplicidade de conceitos, princípios e dimensões. As Redes de Atenção à Saúde revelam-se como uma estratégia para integração dos serviços e são uma alternativa na qualificação do cuidado. Experiências nacionais e internacionais indicam que o cuidado em rede, garante maior eficácia das ações de saúde com cuidados múltiplos pautados em uma integração sistêmica. **Conclusões:** a conformação de Redes de Atenção à Saúde colabora para superação do modelo verticalizado. A estruturação é pautada com base no perfil epidemiológico e colabora para melhoria da atenção prestada, com superação de lacunas assistenciais e redução de custos.

[I] Enfermeiro. Mestre em Enfermagem. Universidade Federal do Rio Grande do Sul (UFRGS). Porto Alegre, Rio Grande do Sul, Brasil. adalvanedamaceno@gmail.com ORCID http://orcid.org/0000-0002-4681-0602

[II] Enfermeira. Doutora em Enfermagem. Universidade Federal do Rio Grande do Sul (UFRGS). Porto Alegre, Rio Grande do Sul, Brasil. malice@enf.ufrgs.br ORCID https://orcid.org/0000-0002-3490-7335

[III] Nutricionista. Mestra em Enfermagem. Universidade Federal de Santa Maria (UFSM). Santa Maria, Rio Grande do Sul, Brasil. vanessarp@hotmail.com ORCID https://orcid.org/0000-0002-4036-316X

[IV] Enfermeira. Doutora em Saúde Pública. Universidade Federal de Santa Maria (UFSM). Santa Maria, Rio Grande do Sul, Brasil. weiller2@hotmail.com ORCID https://orcid.org/0000-0003-2531-0155

CC BY NC SA

Descritores: Atenção Primária à Saúde; Integração de Sistemas, Serviços de Saúde; Cobertura de Serviços de Saúde; Prestação integrada de cuidados de saúde

Resumen: **Objetivo:** debatir y reflexionar sobre las Redes de Atención de Salud, sus conceptos teóricos y los marcos legales en las políticas de salud. **Método:** estudio teórico reflexivo, basado en la literatura científica sobre conceptos teóricos y marcos legales. **Resultados:** la integración de los servicios de salud es una respuesta a la fragmentación de la atención y presenta multiplicidad de conceptos, principios y dimensiones. Las Redes de Atención de Salud son una estrategia para integrar servicios y una alternativa en la calificación de la atención. Las experiencias nacionales e internacionales indican que la atención en red garantiza una mayor efectividad de las acciones de salud con atención múltiple basada en una integración sistémica. **Conclusiones:** la conformación de Redes de Atención de Salud contribuye a superar el modelo vertical. La estructura se basa en el perfil epidemiológico y contribuye a mejorar la atención brindada, superar las brechas de atención y reducir los costos.
Descriptores: Atención Primaria de Salud; Integración de Sistemas; Cobertura de los Servicios de Salud; Prestación Integrada de Atención de Salud

Introduction

The responsibility of Primary Health Care (PHC) in coordinating care and ensuring continuity of care has been the subject of discussion and reflection in the health field. For the current health situation, with the increasing incidence of chronic diseases and changes in the age structure of the population, a response from health services is necessary for the organization of a responsible, efficient and integrated referral system.[1]

The International Conference in Alma-Ata indicated primary care as an integral part of the national health systems. Thus, they constitute the central function and the main focus with respect to the global socioeconomic development of communities. They should, among other functions, be supported by integrated, functional and mutually supported referral systems, leading to the progressive improvement of general health care for all, giving priority to those in greatest need.[2]

New ways of integrating health services have been proposed based on PHC strengthening, mainly through its coordination attribute, placing it as a structuring axis of the system.[3] One of the integration proposals is the implementation of Health Care Networks

(HCNs), in which PHC assumes the role of a structural axis in the design and operation of these systems.[4]

The HCNs are defined as the services and actions that intervene in health-disease processes, based on different technological, logistic and management densities to ensure comprehensive care, improve access, equity, and the proposed effectiveness in the Unified Health System (*Sistema Único de Saúde*, SUS).[4-6] In addition, the common objectives and cooperative and interdependent actions within participatory and democratic organizations, with sets of health services that offer continuous and integral attention to a given population, overcoming the fragmentation of attention and management of health services.[4-6]

Against this background, HCNs are considered the best strategy for addressing care fragmentation and public health problems,[7] since the care models are different for both chronic and acute conditions.[8] Although HCN conformation has been emphasized in health policies, there are some questions about its effectiveness and its contributions to PHC strengthening, such as: how can the difficulty in access to health services by the population be overcome?, or how to overcome the fragmentation of care involving managers, professionals and users of health services?

Considering these questions, this article aims to discuss and reflect on the Health Care Networks, their theoretical concepts and legal frameworks in health policies.

Integration of the health systems

The World Health Organization (WHO) conceptualizes integrated services such as preventive and curative services, continually offered over time to users at different levels of attention.[9] The discussion about health systems integration arose in response to the fragmentation of care and the obstacles to be overcome to promote articulation between health services.[10,11]

However, the literature presents a multiplicity of concepts, principles and dimensions about the integration of the health systems. Thus, the integrated health services account for the health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care, according to the lifelong needs. In addition, those responsible for setting up and maintaining these services are intended to coordinate their interdependence to work on collective and coherent projects for the financing, administration, organization and delivery of services.[11-13]

Although there are a variety of approaches and strategies for systems integration, the literature identifies ten universal principles for the integration of health services. These principles cover comprehensive services at all levels of the care *continuum* as well as patient focus, geographic coverage, and standardized care delivery by inter-professional teams, and service performance management. Also the communication systems, organizational culture, physicians integration in the team, governance structure and financial management, and, finally, elements that can be used by decision makers with the aim of integration.[14]

In addition to the above principles, conceptual and taxonomic elements that allow for the understanding of the integration of health services are indicated, which include the type of integration (organizational, professional, cultural and technological); the level at which integration occurs (macro, meso and micro); the integration process (how integrated care is organized and managed); the extent of the integration (to an entire population group or to a specific group of clients); and the degree or intensity of integration (via a *continuum* ranging from informal liaisons to more managed care coordination and fully integrated teams or organizations).[12-14]

The application of these concepts is an alternative for changing the care model for efficient and effective health services that prioritize PHC as a scenario of health co-production. This encompasses the need for a secure and integrated reference system. It requires clear

investment in new forms of care that must be consistent and have pre-defined rules, for example in the case of chronic conditions that require the simultaneous use of multiple services.

Health care networks

The first complete description of a regionalized network was submitted by the Dawson Report, published in 1920. In that context, changes were sought in the social protection system and the organization of health service provision in the United Kingdom after World War I, based on coordination between preventive and curative services.[15]

For Dawson, the territory would establish the organization of services, which should offer integral attention to the population, based on the characteristics of the system's "gateway". In addition, it would consider population distribution, means of transport, and established flows, varying in size and complexity, depending on the circumstances.[15,16] The cases that could not be resolved in primary and secondary centers would be referred to a referral hospital linked to such services. The organization of the professionals would be integrated so that they could accompany the individuals assigned from the initial complaint to the return home.[16]

The Dawson Report was also responsible for introducing the territorialization of global health systems and indicating the need for articulation between public health and individual care. In the service organization scenario, it formulated the concepts on care levels gateway, bond, referral and coordination by the primary care. And above all, it considered integration mechanisms as information and transport systems.[16]

Networking was conceived as a response to ensuring access and quality to the entire population by providing services and adopting referral mechanisms. Therefore, regionalization should be based on territories compatible with self-sufficiency in health resources at all levels of care, subdivided into districts, sub-regions or micro-regions as a means for ensuring access.[17,18]

HCN conformation, as well as its importance for the qualification of health systems, is justified by the increasing incidence and prevalence of chronic diseases, which require the construction of integrality to intervene in the rising costs of health systems.[4,17] Thus, it is understood that the provision of services should respond to the search for users' needs, from the expanded look, which may benefit their health in their contacts with the different points of the system.

Network proposals in support of public policies have been increasingly adopted to overcome the hegemonic bureaucratic and hierarchical model, in the context of discussions of social issues, privatization processes, accelerated decentralization, globalization, proliferation of non-governmental organizations and strengthening public control.[18,19] Thus, the reorientation of care models needs to include intersectoral actions and include discussions on the complex challenges of health production, with a comprehensive understanding of their problems in a regionalized way, articulating policies for promotion focused on a comprehensive care model.

Conceptual elements of the Health Care Networks

The HCNs are a way of organizing health promotion, prevention and recovery actions and services at all levels of care in a given territory.[17] Thus, the integrality of care can be guaranteed by the construction of such actions, as well as health services with different technological densities and integrated through technical support, logistics and management systems.[11] Therefore, the implementation of user-centered health services and their health needs should be the basis for the clear definition of referral services and information flows in the territory.

In its conformation there are three inseparable elements: population, operational structure and health care model. Regarding the population, it is placed under its sanitary and economic responsibility, and should be organized in the form of management, with emphasis on the management of health care provision. The operational structure consists of the “nodes” of the networks and the material and immaterial links that communicate these different nodes. Nodes are understood as the communication center, primary health care; secondary and tertiary

care points; the supporting systems; the logistic systems and the governance system of the health care network. Finally, health care models are the third component of the HCNs. They can be conceptualized as the logical systems that organize their functioning, uniquely articulating the relationships between the population and their risk-stratified subpopulations, the focus of health care system interventions and the different types of health interventions, defined by situational health analysis.[4,11]

In addition, actions may be taken to successfully implement the HCNs. In this context, it is possible to highlight the availability of professionals with training to work in the community and using the best scientific evidence in the treatment of the most prevalent problems; comprehensive and articulated health actions including surveillance, disease prevention and health promotion; and care management to ensure continuity through regulation of access and integration with other levels of care; availability of a range of services, including other medical specialties of higher prevalence when needed.

International evidence reinforces that the HCNs provide better health and economic outcomes of the health care systems, for example, in caring for people in palliative care,[20] in evaluating inappropriate admissions,[21] in the health of the elderly,[21] and in mental health.[22] Therefore, the construction of a broad health care network implies considering the level of care, due to the specificity of the services, the organization by specialty by life cycle or other criteria based on situational diagnosis.

Care Networks Scenario in Brazil

In the SUS, the modeling of regional health care networks is currently favored by the Management Pact, which aims to improve the effectiveness and quality of SUS management, with the definition of health goals. To this end, it should integrate health promotion, primary health care, outpatient and hospital specialized care, health surveillance and work management and health education into the changes in the health care model, aiming at regionalization.[23]

This process requires cooperation between the municipalities of a given health region, in addition to the qualification of PHC as an organizing body of the system and coordinator of the care offered. Thus, all of the HCN components are important and differentiated by their technological densities, since the concept of hierarchy is replaced by that of polyarchy and the system is organized in the form of a horizontal health care network, having PHC at the center.[4,11] The referral and counter-referral system, for example, is considered as one of the key elements for this organization. The use of a reference and counter reference form aims to provide useful information that contributes to the quality of care and communication among professionals.

Officially in the SUS, there are two legal frameworks for the HCNs. Ordinance No. 4,279, of December 30th, 2010, which establishes guidelines for the organization of health care networks under the SUS and Decree No. 7,508, of June 28th, 2011, which defines the HCN as a form of organization of health promotion, prevention and recovery actions and services integrated by means of technical, logistical and management support systems to ensure comprehensive care.[5,6,11]

Thus, after the agreement between the Ministry of Health, the states and the municipalities, the conceptual consolidation and operational proposal points for the implementation of thematic networks in the health regions of Brazil were sought.[5] In an initial moment, the HCNs were stipulated as a structuring policy of the SUS, the areas to be prioritized due to the epidemiological and care profile being discussed with states and municipalities. The efforts were concomitant with the desire to expand the scope of PHC, in order to make it resolute, by strengthening teamwork, expanding and enhancing the actions of professionals.

Subsequently, respecting the specificities of each thematic network, the phases for the implementation process were considered: diagnosis (situational analysis) and adherence (policy and technique with definition of the driving group); network design (agreement of flows, points

of attention and their missions); contractualization for care points; network element qualification and network certification.[7] It is noteworthy that the greatest effectiveness of health actions is the constitution of more horizontal relationships, with multiple care based on a systemic integration between the various services, which now behave as interrelated points of attention and with permanent channels of care communication.[19]

Thus, acting in these actions, accompanied by the management of clinical care, which is essential for HCN consolidation, requires that the participation of professionals may surpass the vertical care models, including social, managerial and administrative participation. In Brazil, studies focusing on the implementation of maternal and child care, puerperium, follow-up of children's growth and development networks have been identified,[24] in planning the actions of the Emergency Units (EUs) in the health services network.[25] In this sense, regionalized and integrated health care networks offer a structurally more appropriate condition for achieving comprehensive care and reduce the costs of services by conferring greater systemic rationality in the use of the resources.

Although regulated, the challenge of consolidating the HCNs in the SUS faces the allocation of resources to meet care needs, the relationship between the spheres of government and their attributions in the context of health decentralization, intergovernmental management and integration into a care model, where PHC has centrality.[10,16] It is understood that the bureaucratic and fragmented financing model is incompatible to enable planned, scheduled and agreed actions that contemplate the conceptual elements of the HCNs. To ensure this proposal, it is necessary to create formal contracting mechanisms, between regulators and service providers, in programming between services and actions at different care levels.

Conclusions

This article provided a reflective theoretical study on the HCNs and their theoretical concepts and legal frameworks in health policies. The concepts on health services integration, the history and conceptual elements of the HCNs were included. The integration of health services and systems has a positive impact on the quality of life of patients and their families, ensuring continuous and comprehensive care, improving treatment adherence and preventing the onset of health problems and adverse events. International experiences and priority axes in Brazil with their applications were listed. The HCN has been shown as a strategy for the integration of health services, providing an indispensable condition for care qualification and continuity. It is understood that the HCN is paramount in overcoming gaps in care, in the rationalization and in the optimization of the available resources.

The challenges for the consolidation of the proposal lie in the central role of PHC services and, above all, in the funding model. The production about the HCNs in the context of the SUS, still underdeveloped, may be a limiting factor in the scope of the reflections submitted in this article. The considerations herein submitted may contribute to the dissemination of relevant evidence for strengthening Primary Health Care.

References

1. Chueiri OS, Harzheim E, Gauche H, Vasconcelos LLC. Pessoas com doenças crônicas, as redes de atenção e a Atenção Primária à Saúde. Divulg Saúde Debate [Internet]. 2014 [acesso em 2019 fev 14];52:114-24. Disponível em: http://cebes.org.br/site/wp-content/uploads/2014/12/Divulgacao-52.pdf

2. Organização Mundial da Saúde (OMS). Declaração de Alma-Ata. In: Conferência Internacional sobre Cuidados Primários de Saúde; 1978 ; Alma-Ata, Cazaquistão; 1978. p. 6-12.

3. Bainbrige D, Brazil K, Krueger P, Ploeg J, Taniguchi A, Darnay J. Measuring horizontal integration among health care providers in the community: an examination of a collaborative process within a palliative care network. J Interprof Care [Internet]. 2015 [acesso em 2019 fev 14];3(29):245-52. Disponível em: https://doi.org/10.3109/13561820.2014.984019

4. Mendes EV. As redes de atenção à saúde [Internet]. Brasília (DF): Organização Panamericana da Saúde; 2011 [acesso em 2019 fev 14]. Disponível em: https://www.paho.org/bra/index.php?option=com_docman&view=download&category_slug=servicos-saude-095&alias=1402-as-redes-atencao-a-saude-2a-edicao-2&Itemid=965

5. Brasil. Ministério da Saúde. Portaria nº 4.279, de 30 de dezembro de 2010. Estabelece diretrizes para a organização da Rede de Atenção à saúde no âmbito do sistema único de saúde [Internet]. Brasília (DF); 2010 [acesso em 2019 fev 14]. Disponível em: http://conselho.saude.gov.br/ultimas_noticias/2011/img/07_jan_portaria4279_301210.pdf

6. Brasil. Ministério da Saúde. Decreto nº 7.508, de 28 de junho de 2011. Regulamenta a Lei nº 8.080, de 19 de setembro de 1990, para dispor sobre a organização do Sistema Único de Saúde - SUS, o planejamento da saúde, a assistência à saúde e a articulação interfederativa, e dá outras providências [Internet]. Brasília (DF); 2011 [acesso em 2019 fev 14]. Disponível em: http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2011/Decreto/D7508.htm

7. Magalhães Júnior HM. Redes de Atenção à Saúde: rumo à integralidade. Divulg Saúde Debate [Internet]. 2014 [acesso em 2019 fev 14];52:15-37. Disponível em: http://cebes.org.br/site/wp-content/uploads/2014/12/Divulgacao-52.pdf

8. Santos CM, Barbieri AR, Gonçalves CCM, Tsuha DH Avaliação da rede de atenção ao portador de hipertensão arterial: estudo de uma região de saúde. Cad Saúde Pública [Internet]. 2017 [acesso em 2019 fev 14];33(5):e00052816. Disponível em: http://www.scielo.br/pdf/csp/v33n5/1678-4464-csp-33-05-e00052816.pdf

9. Organização Mundial da Saúde (OMS). WHO global strategy on people-centred and integrated health services: interim report [Internet]. Geneva: World Health Organization; 2015 [acesso em 2019 fev 14]. Disponível em: http://www.who.int/iris/handle/10665/155002

10. Santos AM, Giovanella L. Regional governance: strategies and disputes in health region management. Rev Saúde Pública [Internet]. 2014 [acesso em 2019 fev 14];48(4):622-31. Disponível em: http://www.scielo.br/pdf/rsp/v48n4/0034-8910-rsp-48-4-0622.pdf

11. Mendes EV. As redes de atenção à saúde. Ciênc Saúde Colet [Internet]. 2010 [acesso em 2019 fev 14];15(5):2297-305. Disponível em: http://www.scielo.br/pdf/csc/v15n5/v15n5a05.pdf

12. Armitage GD, Suter E, Oelke ND, Adair CE. Health systems integration: state of the evidence. Int J Integr Care [Internet]. 2009 [acesso em 2019 fev 14];9(82):1-11. Disponível em: https://www.ijic.org/articles/10.5334/ijic.316/

13. Goodwin N, Smith J. The evidence base for integrated care [Internet]. London: The King's Fund and the Nuffield Trust; 2012 [acesso em 2019 fev 14]. Disponível em: https://www.ijic.org/articles/10.5334/ijic.316/

14. Suter E, Oelke ND, Adair CE, Armitage GD. Ten key principles for successful health systems integration. Healthc Q [Internet]. 2009 [acesso em 2019 fev 14];13(N Spec):16–23. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004930/pdf/nihms1308.pdf

15. Organização Panamericana de Saúde (OPAS). Informe Dawson sobre el futuro de los servicios medicos y afines, 1920 [Internet]. Ministerio de Salud de la Gran Bretana. Londres: Organização Panamericana de Saúde; 1964 [acesso em 2019 fev 14]. Disponível em: http://apps.who.int/iris/bitstream/handle/10665/169356/42178.pdf?sequence=1&isAllowed=y

16. Kuschnir R, Chorny AH. Redes de atenção à saúde: contextualizando o debate. Ciênc Saúde Colet [Internet]. 2010 [acesso em 2019 fev 14];15(5):2307-16. Disponível em: http://www.scielo.br/pdf/csc/v15n5/v15n5a06.pdf

17. Silva RM, Andrade LOM. Coordenação dos cuidados em saúde no Brasil: o desafio federal de fortalecer a atenção primária à saúde. Physis (Rio J) [Internet]. 2014 [acesso em 2019 fev 14];4(24):1207-28. Disponível em: http://www.scielo.br/pdf/physis/v24n4/0103-7331-physis-24-04-01207.pdf

18. Almeida PF, Santos AM, Santos VP, Silveira Filho RM. Integração assistencial em região de saúde: paradoxo entre necessidades regionais e interesses locais. Saúde Soc [Internet]. 2016 [acesso em 2019 fev 14];25(2):320-35. Disponível em: http://www.scielo.br/pdf/sausoc/v25n2/1984-0470-sausoc-25-02-00320.pdf

19. Medeiros KKAS, Pinto Júnior EP, Bousquat A, Medina MG. O desafio da integralidade no cuidado ao idoso, no âmbito da Atenção Primária à Saúde. Saúde Debate [Internet]. 2017[acesso em 2019 fev 14];41(N Esp 3):288-95. Disponível em: https://www.scielosp.org/pdf/sdeb/2017.v41nspe3/288-295/pt

20. Eerden MH, Ewert B, Hodiamont F, Hesse M, Hasselaar J, Radbruch L. Towards accessible integrated palliative care: perspectives of leaders from seven European countries on facilitators, barriers and recommendations for improvement. J Integr Care (Brighton) [Internet]. 2017[acesso em 2019 fev 14];25(3):222-32. Disponível em: https://www.emeraldinsight.com/doi/pdfplus/10.1108/JICA-03-2017-0006

21. Mangan C, Pietroni M, Porter D. "Being brave": a case study of how an innovative peer review approach led to service improvement. J Integr Care (Brighton) [Internet]. 2016 [acesso em 2019 fev 14];24(4):201-13. Disponível em: https://www.emerald.com/insight/content/doi/10.1108/JICA-06-2016-0021/full/html

22. Oreilly O, Hanlon D. Irish Integrated Care Programme for Chronic Disease - supporting general practice. Int J Integr Care [Internet]. 2017 [acesso em 2019 fev 14];17(3):1-8. Disponível em: https://www.ijic.org/articles/abstract/10.5334/ijic.3167/

23. Menicucci TMG, Costa LA, Machado JA. Pacto pela saúde: aproximações e colisões na arena federativa. Ciênc Saúde Colet [Internet]. 2018 [acesso em 2019 fev 14];23(1):29-40. Disponível em: https://www.scielosp.org/pdf/csc/2018.v23n1/29-40/pt

24. Frank BRB, Toso BRGO, Viera CS3, Guimarães ATB, Caldeira S. Avaliação da implementação da Rede Mãe Paranaense em três regionais de saúde do Paraná. Saúde Debate [Internet]. 2016 [acesso em 2019 fev 14];40(109):164-74. Disponível em: http://www.scielo.br/pdf/sdeb/v40n109/0103-1104-sdeb-40-109-00163.pdf

25. Uchimura LYT, Viana ALD, Silva HP, Ibanez N. Unidades de Pronto Atendimento (UPAs): características da gestão às redes de atenção no Paraná. Saúde Debate [Internet]. 2015 [acesso em 2019 fev 14];39(107):972-83. Disponível em: http://www.scielo.br/pdf/sdeb/v39n107/0103-1104-sdeb-39-107-00972.pdf

Corresponding author

Adalvane Nobres Damaceno
E-mail: adalvanedamaceno@gmail.com
Address: Programa de Pós Graduação em Enfermagem – Rua: São Manoel, 963 – Bairro: Rio Branco – Porto Alegre, Brazil.
ZIP CODE: 90620-110

Authorship Contributions

Author 1 – Adalvane Nobres Damaceno
Author of the manuscript, writing of the article and review of the final text.

Author 2 – Maria Alice Dias da Silva Lima
Advisor in the writing the manuscript and review of the final text.

Author 3 – Vanessa Rodrigues Pucci
Critical review of the manuscript.

Author 4 – Teresinha Heck Weiller
Critical review of the manuscript.

How to cite this article

Damaceno AN, Lima MADS, Pucci VR, Weiller TH. Health care networks: a strategy for health systems integration. Rev. Enferm. UFSM. 2020 [Accessed at: Year Month Day]; vol.10 e14: 1-13. DOI:https://doi.org/10.5902/2179769236832