IMPLEMENTATION STRATEGY OF APPLICATION FOR NURSING PRESCRIPTION ESTRATÉGIA DE IMPLANTAÇÃO DE APLICATIVO PARA PRESCRIÇÃO DE ENFERMAGEM ESTRATEGIA DE IMPLANTACIÓN DE APLICATIVO PARA LA PRESCRIPCIÓN DE ENFERMERÍA

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ABSTRACT

Objective: to report the experience of COIIISAE in the implementation of the module "Prescription of Nursing", whose potential qualifies Nursing praxis in the services managed by the company. **Method:** descriptive study, type of experience report, carried out in a university hospital. **Results:** the implementation took place through the following phases: 1) Strategic diagnosis (vision of present and future scenarios); 2) Strategic plan (strategic objectives); 3) Strategic initiative (unfolding of strategic objectives); 4) Prioritization of 2015-2016 initiatives; 5) Implementation and monitoring. **Conclusion:** the accessibility of the tool was favorable to perform the Nursing prescriptions, however, it should be emphasized the responsibility of the nurse in keeping the prescription updated. **Descriptors:** Strategies; Health Facility Planning; Nursing Informatics; Nursing Processes; Nursing Care; Information Technology.

RESUMO

Objetivo: relatar a experiência do COIIISAE na implantação do módulo "Prescrição de Enfermagem", cujas potencialidades qualificam a *práxis* de Enfermagem nos serviços geridos pela empresa. **Método:** estudo descritivo, tipo relato de experiência, realizado em um hospital universitário. **Resultados:** a implantação ocorreu por meio das seguintes fases: 1) Diagnóstico estratégico (visão dos cenários presentes e futuros); 2) Plano estratégico (objetivos estratégicos); 3) Iniciativa estratégica (desdobramentos de objetivos estratégicos); 4) Priorização das iniciativas 2015/2016; 5) Execução e acompanhamento. **Conclusão:** a acessibilidade da ferramenta demonstrou-se favorável para realizar as prescrições de Enfermagem, entretanto, cumpre ressaltar a responsabilidade do enfermeiro ao manter atualizada a prescrição. **Descritores:** Estratégias; Planejamento de Instituições de Saúde; Informática em Enfermagem; Processos de Enfermagem; Cuidados de Enfermagem; Tecnologia da Informação.

RESUMEN

Objetivo: relatar la experiencia del COIIISAE en la implantación del módulo "Prescripción de Enfermería", cuyas potencialidades califica la *praxis* de Enfermería en los servicios gestionados por la empresa. **Método:** estudio descriptivo, tipo relato de experiencia, realizado en un hospital universitario. **Resultados:** la implantación ocurrió por medio de las siguientes fases: 1) Diagnóstico estratégico (visión de los escenarios presentes y futuros); 2) Plan estratégico (objetivos estratégicos); 3) Iniciativa estratégica (desdoblamientos de objetivos estratégicos); 4) Priorización de las iniciativas 2015/2016; 5) Ejecución y acompañamiento. **Conclusión:** la accesibilidad de la herramienta se demostró favorable para realizar las prescripciones de Enfermería, sin embargo, debe resaltar la responsabilidad del enfermero al mantener actualizada la prescripción. **Descriptor:** Estrategias; Planificación de Instituciones de Salud; Informática Aplicada a la Enfermería; Proceso de enfermería; Atención de Enfermería; Tecnología de la información.

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INTRODUCTION

The Systematization of Nursing Assistance (SNA) is a method used by nurses to forecast their care to provide greater patient safety, improve the quality of care and autonomy for professionals.¹ It can also be understood as a practice of planning of Nursing actions and is supported through Resolution 358/2009. This same resolution has recommended that Nursing care should be systematized through the Nursing Process (NP).²

As the nurse in the hospital develops numerous functions and responsibilities,³ needs management tools to assist him in the care provided. It is essential to provide tools that favor the implementation of the NP in all its stages in practice, such as printed to assist in the collection and recording of data of the individual, family or community and/or software that helps in the execution of the steps of the scientific method.¹ In this scenario, informatics has contributed to the development of software aimed at the operationalization of NP stages,⁴ however, the use of such tools requires the follow-up of nurses and managers in order to carry out all stages of the NP, as well as the agreement individual requirements.

This study concluded that, besides the Nursing prescriptions were not being performed in their entirety, they were not in line with the real needs of the patients.⁵ Faced with this problem, the Brazilian Hospital Services Company (BHSC) developed the module "Nursing Prescription", whose theoretical framework is based on the theory of Basic Human Needs and taxonomy of *NANDA International*.⁶ This module is available for deployment in the branch offices of university hospitals managed by the company, throughout Brazil, through an application for use in computers.

Due to the need for such implementation in one of the services managed by the company, the SNA Implantation and Implementation Committee (SNAIIC) was developed to discuss implementation strategies and promote training of the Nursing team in the use of the tool.

OBJECTIVE

- To report SNAIIC's experience in the implementation of the module "Prescription of Nursing", whose potential qualifies

Nursing *praxis* in the services managed by the company.

METHOD

Descriptive study, a type of experience report, carried out from May 2015 to June 2016, in a university hospital in the city of Petrolina, PE, Brazil. This report was developed by SNAIIC members, who were included in the educational activities carried out for Nursing professionals, in meetings with the Nursing leaders of the sectors and with the Information Technology sector of the service.

The module "Prescription of Nursing" refers to the Nursing prescription, and comprises two of the five stages of SAE: the Nursing Diagnosis and the Planning (Nursing Prescription).

It presents as advantages: alignment of patient care processes performed at Federal University Hospitals (FUH's); service qualification; production of quality indicators; exchange of managerial and health information, and the development of a collaborative community of HUF's nurses in which everyone can benefit from each others innovations.⁷

Other important actions of the application are: the correct Nursing prescription, saving of expedient material and optimization of the time spent to carry out the NP, problems recently highlighted by nurses to implement SNA in health service.²

The study site has been managed by BHSC since February 1, 2015 and is the reference unit for the 53 municipalities of the Interstate Health Care Network of the São Francisco Valley (PEBA Network), covering a population of approximately 2,068,000. It performs emergency and emergency care, with emphasis on traumato-orthopedics, general surgery, buco-maxilo, medical clinic, nephrology, dermatology and plastic surgery.⁸

With the establishment of SNAIIC, the Nursing team showed interest in implanting the Nursing prescription, which was not previously performed in the service.

RESULTS

An own regiment was drawn up by the commission that contemplated the training of Nursing professionals, as well as the

monitoring and the supervision of the implementation of the module "Prescription of Nursing" in said service.

This regiment was approved by the superintendency of the hospital and an ordinance was issued to appoint its members.⁹ For the implementation of the tool, the service committee deployed the company's strategic planning for deployment planning.

The implementation took place through the following phases: 1) Strategic diagnosis (vision of present and future scenarios); 2) Strategic plan (strategic objectives); 3) Strategic initiative (unfolding of strategic objectives); 4) Prioritization of 2015-2016 initiatives; 5) Implementation and monitoring.

The implementation of the tool was performed through in-service training in five stages. In step 1, the sectors were defined which would initiate Nursing prescription through the application: orthopedic clinic, surgical clinic, medical clinic, intensive care unit and green and yellow emergency rooms.

In step 2, the partnership with the Nursing leaders was established and a set timetable for each sector was established. We chose to start in the orthopedic clinic, since all the professionals in this sector were employed by BHSC.

In step 3, collective trainings with nurses were considered, by sectors. The same would occur in the computer lab attached to the hospital.

In step 4, it was established that, a priori, training would contemplate all nurses and, later, Nursing technicians. The primary training of nurses was due to the immediate need for implementation of the application by these professionals.

In stage 5, the training began in the laboratory. However, there was great

abstinence from the nurses. It should be noted that strategic planning is dynamic, and, sometimes, adjustments are necessary in some of its phases to reach the goals and targets.

Due to the problem of the small number of nurses attending the scheduled collective training, it was decided to carry out on-the-job training, that is, in the work sector, in order to include a larger number of trained professionals.

Committee members began, rotating day, evening, and evening shifts to meet training needs. The result at the end was considered satisfactory. Because nurses were trained in their work hours, they did not have to move from their sectors to do it. The SNAIC member sought to respect the convenience of the professional who was performing management activities and Nursing care.

In this way, it was possible, to implant the module in four of the six sectors of the hospital. The two sectors that were not contemplated with the training were those that remained with patients for a period shorter 24 hours, such as the emergency rooms and surgical center, making difficult the continuity of the SNA.

The training contemplated access to the system (Figure 1), configuration of patient list, according to the clinical practice (Figure 2), how to elaborate a new prescription (Figures 3 and 4) and how to choose the prescription modality by "signal and symptom "Or" diagnosis "(Figure 5), as well as selection of care, exclusion of care, insertion of observations regarding care, conclusion / printing of the prescription and updating of the same.

Figure 1. Access to the "Prescription Nursing" module.
Source: BHSC. Available in: <http://www.ebserh.gov.br/web/aghu/prescricao-de-enfermagem/manual-usuario>

Ação	Sigla	Especialidade
	MAN	ANGIOLOGIA

Ação	Código	Descrição
	123	00 - CLÍNICA MÉDICA

Figure 2. List configuration by actuation clinic.
Source: BHSC. Available in: <http://www.ebserh.gov.br/web/aghu/prescricao-de-enfermagem/manual-usuario>

Ação	Local	Nome	Idade	Prontuário	Dt. Atendimento						
	L-0103A	ALAIDE E6CD4 A8314 2BEB1654	57	3365093	29/12/14 10:50						
	L-0107A	ROBLEDO 2849DE 84B8DA21	27	2018018	22/01/15 14:11						
	L-0203D	ADEIR E197A 75417 DBFCCC4	85	3251824	04/03/15 14:06						
	L-0210C	MARIA 62F982C09 3A A42E3	82	3117843	09/10/14 17:19						
	L-0213A	ACENTA E197A A8314 3A 4024D192	57	3751815	28/10/14 10:30						
	L-0213A	GRILIA DE LEMES	28	4225643	11/02/15 15:04						

Prescrever

Evolução

Solicitar Exames

Diag. Enf. Ativo

Diag. Enf. Paciente

Contracheque

Figure 3. Elaboration of new prescription. Part 1. Source: BHSC. Available in: <http://www.ebserh.gov.br/web/aghu/prescricao-de-enfermagem/manual-usuario>

Figure 4. Elaboration of new prescription. Part 2. Source: BHSC. Available in: <http://www.ebserh.gov.br/web/aghu/prescricao-de-enfermagem/manual-usuario>

Figure 5. Choice of prescription mode: "signs and symptoms" or "diagnosis". Source: BHSC. Available in: <http://www.ebserh.gov.br/web/aghu/prescricao-de-enfermagem/manual-usuario>

The follow-up of the prescriptions, regarding achievement and validity was performed by the module "Prescription of Nursing", that is, the system presented the prescriptions that were not performed and updated. The visualization was performed by sector, and the member could identify the patient that was not contemplated by the prescription or did not obtain update of the Nursing prescription.

The head of Information Technology also created a WhatsApp application group, which, automatically sent, SNAIIC members, the number of valid prescriptions per sector, that is, those that were within 24 hours.

DISCUSSION

Despite the need to re-adjust the training strategy, the collectives demanded some positive and negative points from the nurses, regarding the use of the tool.

As for the tool, the positive point was the rapid accessibility to it, since the application is made available in the desktop of all the computers of the diverse sectors of the health service.

As negative points, were listed the availability of computers for the exclusive

use of nurses, since other members of the multiprofessional team also used them for other purposes, and the need to update the module program version for NANDA 2015-2017, since the application provided the 2008 version.

This prism of evaluation of electronic prescriptions in the health services, regarding the postive and negative aspects, is thematic in recent studies^{10,11}, which stand out, beyond the perspectives of the health professionals who perform the prescription, the perspectives of the care patients and those of the health managers.

It is noteworthy that, during training sessions with nurses, SNAIIC members observed the low familiarity of professionals with Nursing prescription. Many nurses reported having performed the SNA only during graduation.

With the effort employed by members of SNAIIC and the nurses of the service, the benefits brought by the "Prescription of Nursing" application were perceived, which proved to be practical, agile and promoted savings of resources of record material.

It was also observed that, if the nurse does not perform frequent evaluations of

the patients, the prescribed Nursing care will no longer meet their real needs.

Another potential risk would be an inappropriate and inadvertent reproduction of Nursing care, which does not contemplate the individuals' individuality.

It is important to emphasize that this report did not contemplate the experience of the training of Nursing technicians, as it did not occur.

CONCLUSION

The application for electronic Nursing prescription involves participation of several actors for its implementation. Through this fact, it becomes fundamental the participation of Nursing professionals and information technology, to draw up feasible strategies that meet the needs of nurses and the service.

The accessibility of the tool proved to be favorable in order to carry out the Nursing prescriptions, however, it is important to emphasize the responsibility of the nurse in keeping the prescription updated.

Training activities should consist of continuing activities, otherwise the implementation of the prescription may be compromised.

It is hoped, with this work, to share experiences on the implantation and usability of Nursing prescription application at hospital level, as well as, to reflect on some potentialities of its use. It is also recommended that the application's NANDA taxonomy be updated, according to its updates, and that other reports are produced in this trajectory, to identify other obstacles in application deployment.

REFERENCES

1. Tannure M, Pinheiro AM. Sistematização da assistência de enfermagem: guia prático. 2nd ed. Rio de Janeiro: Guanabara Koogan; 2010.
2. Conselho Federal de Enfermagem. Resolução COFEN N-358/2009. Dispõe sobre a Sistematização da Assistência de Enfermagem e a implementação do Processo de Enfermagem em ambientes, públicos ou privados, em que ocorre o cuidado profissional de Enfermagem, e dá outras providências [Internet]. Brasília: COFEN; 2009 [cited 2017 Mar 01]. Available from: http://www.cofen.gov.br/resoluco-cofen-3582009_4384.html
3. Soares MI, Resck ZMR, Terra FS, Camelo SHH. Systematization of nursing care: challenges and features to nurses in the care management. Esc Anna Nery Rev Enferm. 2015 Jan/Mar;19(1):47-53. Doi: <http://dx.doi.org/10.5935/1414-8145.20150007>
4. Cavalcante RB, Ferreira MN, Silva LTC, Silva PC. Experiences of computing in nursing in Brazil: a study bibliographic. J Health Inform [Internet]. 2011 July/Sept [citado 2017 Mar 01];3(3):130-4. Available from: <http://www.jhi-sbis.saude.ws/ojs-jhi/index.php/jhi-sbis/article/view/149/9>
5. Faeda MS, Perroca MG. Care management: agreement between nursing prescriptions and patients' care needs. Rev Latino-Am Enfermagem. 2016 Aug; 24: e2723. Doi: <http://dx.doi.org/10.1590/1518-8345.0645.2723>
6. North American Nursing Diagnosis Association. Diagnósticos de enfermagem da NANDA: definições e classificação 2005-2006. Porto Alegre: Artmed; 2006.
7. Ministério da Educação (BR), EBSEH - Hospitais Universitários Federais. AGHU - Aplicativo de Gestão para Hospitais Universitários. Módulo Prescrição de Enfermagem [Internet]. Brasília: EBSEH; 2017 [cited 2017 Mar 01]. Available from: <http://www.ebserh.gov.br/web/aghu/prescricao-de-enfermagem/apresentacao>
8. Ministério da Educação (BR), EBSEH - Hospitais Universitários Federais. Hospital Universitário do Vale do São Francisco: Nossa história [Internet]. Petrolina: HU-Univasf; 2017 [cited 2017 Mar 01]. Available from: <http://www.ebserh.gov.br/web/hu-univasf/nossa-historia>
9. Ministério da Educação (BR), EBSEH - Hospitais Universitários Federais. Boletim de Serviço [Internet]. 2016 Feb [cited 2017 Mar 01];04:1-8. Available from: <http://www.ebserh.gov.br/documents/220938/765740/Boletim+de+Servi%C3%A7o+n%C2%B0+04,+de+02+de+fevereiro+de+2016.pdf/c539e2fd-8618-4387-86a6-b240e69b72d4>
10. Demuro PR, Ash J, Middleton B, Fletcher J, Madison CJ. How stakeholder assessment of e-prescribing can help determine incentives to facilitate management of care: a delphi study. J Manag Care Spec Pharm. 2017 Nov; 23 (11):1130-9. Doi: 10.18553/jmcp.2017.23.11.1130

Alencar IGM de, Nunes VS, Alves AS et al. Implementation strategy of application for...

11. Demuro PR, Ash J, Middleton B, Fletcher J, Madison CJ. A quality, benefit, cost and financial framework for health information technology, e-prescribing: a delphy study. *Stud Health Technol Inform* [Internet]. 2017[cited 2017 Mar 01];241:69-75. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28809185>

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