

<http://dx.doi.org/10.1590/0104-070720180003360016>

BILLING OF LEVEL II WOUND TREATMENT AND RECORDS: NURSING CONTRIBUTIONS¹

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¹ Text extracted from the dissertation - Analysis of wound treatment records in the patient record of a teaching hospital in the state of Goiás, presented to the Graduate Nursing Program, *Universidade Federal de Goiás* (UFG), 2016.

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ABSTRACT

Objective: to verify whether an educational action developed with nurses contributed to improved documentation on wound treatment, thereby enabling more accurate billing related to level II wound treatment

Methods: exploratory, descriptive and quantitative study. Data were collected from the prescription and evaluation sheets of the clinical record, and from the hospital data processing center, before and after the educational action focusing on the importance of nursing records. Among 532 events reviewed, 266 were before and 266 after the intervention. The variables were analyzed according to frequencies and percentages, namely: prescription, evaluation, schedule time, documentation, professional category of the prescriber and the person performing the procedure. The associations between variables were analyzed using the Chi-square or the test for the difference in proportions.

Results: the amount of prescriptions, schedule time, and documentation increased after the educational action, which directly influences billing for the procedure; costs were R\$ 9,201.60 before and R\$ 25,142.40 after the action. No significant change was identified in the nursing evaluation related to the procedure.

Conclusion: an increase in prescriptions after the educational action was verified, which, in turn, resulted in an increase in billable services. Further studies involving billing as a result of nursing records of interventions are necessary, as well as the investment of the managers in educational actions.

DESCRIPTORS: Billing. Prescriptions. Nursing records. Wound healing. Nursing.

FACTURACIÓN DE CURATIVOS DE GRADO II Y REGISTROS: CONTRIBUCIONES DE LA ENFERMERÍA¹

RESUMEN

Objetivo: este estudio verificó si una acción educativa desarrollada con enfermeros contribuyó para el registro de curativos y, consecuentemente, para el aumento de la facturación del procedimiento curativo del grado II.

Método: estudio exploratorio y descriptivo-cuantitativo. Los datos fueron obtenidos de las hojas de prescripción y evolución del prontuario y en el Centro de Procesamiento de datos del hospital, antes y después de una acción educativa, cuyo enfoque fue la importancia de los registros de enfermería. Se obtuvieron 532 ocurrencias, siendo 266 antes y 266 después de la intervención. Las variables fueron analizadas según sus frecuencias y porcentajes, a saber: prescripción, evolución, aplazamiento, chequeo del curativo, categoría profesional del prescriptor y del ejecutor del procedimiento. Para el análisis de asociaciones entre variables se utilizaron los testes Chi-cuadrado o el Test de Diferencia de Proporción.

Resultados: después de la acción educativa, se verificó el aumento en el número de los registros de prescripciones, aplazamientos y chequeos, hecho que interfiere directamente en la facturación de este procedimiento y cuyo demostrativo presentado por la unidad correspondió a R\$ 9.201,60 antes y R\$ 25.142,40 después de la acción. No hubo alteración significativa en el registro de la evolución del procedimiento.

Conclusión: de esta forma, se evidenció el aumento de las prescripciones después de la acción educativa, y así, resultó en el aumento de la facturación. Por lo tanto, se recomienda la proposición de estudios referentes a la facturación, relacionados con los registros de las acciones efectuadas por la enfermería, así como la inversión de los gestores en acciones educativas.

DESCRIPTORES: Facturación. Prescripción. Registros. Curativo. Enfermería.

INTRODUCTION

The patient record is important for all areas of knowledge; it is present in our daily lives and, in the health area, is useful for the clinical assessment of the patients and evaluation of the care provided. It is also fundamental for hospital billing.¹ In this time, when concerns about costs are present in the administration of health services, missing or incorrect records lead to losses in hospital reimbursement; therefore, billing is a factor of great importance.²

Billing is the “set of receipts expressed in money units, obtained by a company for the sale of goods or services in a specific period”,³ therefore, hospital billing is the receipt of a transfer corresponding to the data processing related to the provided care.⁴

The payment through the Unified Health System (SUS) adheres to a financial ceiling agreed between the healthcare units and the municipal or state health manager.⁵ Every hospital admission generates charges for a clinical or surgical procedure, provided in a price list, which must be in accordance with the clinical or surgical procedure that caused the hospitalization. Due to the fact that the payment for nursing care is included in hospital rates or procedures fees,⁶ it is not possible to determine precisely the contribution of nursing to the billing of public institutions.

The billing of level II wound treatment, classified as a special procedure occurs by adding a value to the hospital admission authorization (AIH) form. This action enables verification of what was billed based on the prescribed procedure, which consists of treatment of an open wound with a large area of affected tissue. The billing for this procedure is based upon the record, that is, on the prescription made by a physician or nurse. There is a maximum limit of 31 procedures per month per patient. Each time this procedure is prescribed, the amount of R\$ 32.40 (thirty-two reais and forty cents) is added to the hospital bill.⁷

Adequate prescribing, documentation, scheduling, evaluation, and execution of the procedure can minimize underbilling, contribute to nursing visibility, and prove the importance of the records for health professionals. Therefore, the aim was to verify if an educational action would contribute to improvements in the record of wound treatment, and consequently increase billing for level II wound treatments.

METHODS

This was an exploratory, descriptive study conducted in a university hospital in the Central West Region of Brazil.

An educational action was developed in May of 2015, aiming to demonstrate the importance of nursing records, and especially in relation to level-II wound treatment. Nurses from the institution were the target audience of the educational activity, which included two modules, with eight hours of training per class. The first module was comprised of the records and their relevance to the audit. In the second module, questions related to the SUS billing model were addressed, as well as records of level II wound treatment, and the enforcement of prescription and proper documentation of this procedure for the respective hospital billing.

The teaching-learning method used was an expository presentation with moments of debate, encouraging discussion among nurses. The activity was administered twice, once in the morning and the other in the evening, to support the participation of all nurses. To evaluate the effectiveness of the educational action, the data were collected from clinical records before and after this activity, and compared with the hospital billing of the year in which the action was performed.

The data were collected from two sources - the prescription sheets and documentation in the clinical records - in two different moments: in February (prior to the educational action) and July of 2015 (after the educational action). Patients admitted to the clinical, surgical, and orthopedic clinics, over 18 years of age, and who required level II wound treatment were included. The billing information related to wound treatment for 2015 was obtained from the data processing center (DPC) of the hospital.

The data extracted from the clinical records were information related to the prescriptions, schedule time, documentation, executions, and evaluation of the procedure by professionals involved in the care (nurses, physicians, nursing technicians, residents, and medical and nursing faculty).

For information collection, a checklist validated by experts was used, administered before and after the educational action. The sample of patient records from February of 2015 included 266 procedures, and patient requirements for level II wound treatment. In July of 2015, a new convenience sampling was used to obtain the same number of

occurrences, from those requiring wound treatment, according to the same criteria.

The SPSS/IBM - Statistical Package for Social Science, version 21.0 was used for statistical analysis. The following variables were analyzed: prescribing, scheduling, documentation, prescriber, and executor of the procedure. The qualitative variables were presented according to frequencies and percentages, and their associations using the Chi-square test or a Test for Differences in Proportions.

The Ethics Committee of the Hospital das Clínicas - UFG, approved the project, under CAAE 26740514.0.0000.5078, protocol number 616.998/14.

RESULTS

As noted in Table 1, 219 (82.3%) prescriptions, 197 (74%), schedule time, and 190 (71.4%) level II wound treatment records were found. Thus, the educational intervention proved to be effective, as results showed there was a statistically significant increase in these records ($p < 0.001$).

There was also a change in the frequency of the evaluations ($p = 0.018$), at both moments.

Table 1 - Records of level II wound treatment, before (n=266) and after (n=266) educational action. Goiânia-GO, Brazil, 2015.n=266

| Prescription | Time | | p |
|----------------------|-------------|------------|--------|
| | Before n(%) | After n(%) | |
| Yes | 133 (50) | 219 (82.3) | <0.001 |
| No | 133 (50) | 47 (17.7) | |
| Schedule time | | | |
| Yes | 68 (25.6) | 197 (74) | <0.001 |
| No | 198 (74.4) | 69 (26) | |
| Documentation | | | |
| Yes | 67 (25.2) | 190 (71.4) | <0.001 |
| No | 199 (74.8) | 76 (28.6) | |
| Evaluation | | | |
| Yes | 70 (26.3) | 89 (35.5) | 0.018 |
| No | 196 (73.7) | 177 (66.5) | |
| Total | 266 | 266 | |

Test: Difference in proportions

Among the cases where a prescription was present, those performed by nurses before and after the educational action increased by 51.6%, while there was a proportional decrease in prescriptions among physicians 38.8% ($p < 0.001$), and 10% ($p < 0.001$) among the students (Table 2).

Table 2 - Prescription of level II wound treatment, before (n=133) and after (n=219) educational action, according to the professional category. Goiânia-GO, Brazil, 2015.

| Professional | Time | | p |
|-------------------|-------------|------------|---------|
| | Before n(%) | After n(%) | |
| Physician | 76 (57.1) | 40 (18.3) | < 0.001 |
| Nurse | 37 (27.8) | 174 (79.4) | < 0.001 |
| Student | 14 (10.5) | 1 (0.5) | < 0.001 |
| Resident | 1 (0.8) | 3 (1.3) | 0.142 |
| No identification | 5 (3.8) | 1 (0.5) | 0.013 |
| Total | 133 (100) | 219 (100) | |

Test: Difference in proportions

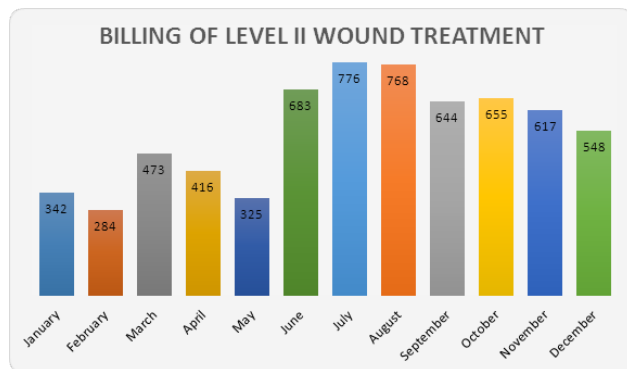
Considering the execution of the procedure and its proper documentation, an improvement was perceived in the professional identification after the educational action; only 27 (10.4%) of the records lacked a professional signature ($p < 0.001$) as compared to 159 (61%) prior to the intervention (Table 3). There was no difference in the amount of occurrences, where the procedure was executed, or in the lack of proper records of execution ($n = 5$ before and after the educational action).

Table 3 - Execution of level II wound treatment, before (n=261) and after (n=261) educational action, according to the professional category. Goiânia-GO, Brazil, 2015.

| Professional | Time | | p |
|-------------------|-------------|------------|---------|
| | Before n(%) | After n(%) | |
| Physician | 3 (1.1) | 10 (3.8) | 0.012 |
| Nurse | 29 (11.1) | 59 (22.6) | < 0.001 |
| Student | 56 (21.4) | 34 (13) | 0.003 |
| Resident | 14 (5.4) | 121 (46.4) | < 0.001 |
| No identification | 0 (0) | 10 (3.8) | < 0.001 |
| Physician | 159 (61) | 27 (10.4) | < 0.001 |
| Total | 261(100) | 261(100) | |

Test: Difference in proportions

The impact of the educational action can be demonstrated by data related to the monthly billing for level II wound treatment in 2015, presented in Figure 1, which shows that 284 procedures were processed during February, corresponding to R\$9,201.60 (nine thousand, two hundred and one reais and sixty cents); in July, 776 procedures represented R\$ 25,142.40 (twenty-five thousand, one hundred and forty-two reais and forty cents).



Source: CDI 2015.

Figure 1 - Monthly billing of level II wound treatment at the hospital where the study was conducted. Goiânia-GO, Brazil, 2015.

The billing values increased significantly beginning in June, that is, after the educational action. After the peak point of the curve, there is a downward trend, demonstrating the need for continuing education actions.

The analysis of 532 occurrences from the two moments of data collection showed that 352 (66.1%) procedures were prescribed, 522 (98.1%) were executed and properly recorded, and 170 (32%) procedures were performed without prescription, which made it impossible for billing to occur. Therefore, the service lost the opportunity to bill for R\$ 5,508.00 (five thousand, five hundred and eight reais), considering the current amount of R\$ 32.40 (thirty-two reais and forty cents) by procedure.

DISCUSSION

After the educational action, a significant increase in the amount of records related to the prescription of the procedure, documentation, and scheduling was identified, inferring that such modifications are the result of the intervention administered. The activity developed with the nurses stressed the importance of proper records, mainly by nurses, with a greater emphasis on prescription of these procedures to enable applicable billing.

The educational action is a timely action that enables training and transformative actions that support changing of thoughts and actions.⁸ However, for a behavioral change, investment in continuing education is imperative, to maintain a state of constant improvement among members of

the team,⁹ which are demonstrated by the numbers found in figure 1.

Continuing education for nurses enables professionals to continuously improve education and technical training processes, developing qualifications for incorporating principles of humanization, where searching for care improvement promotes a sense of patient welcoming, but also considers costs and effectiveness.¹⁰

Aiming to promote the team's knowledge, an intense trend towards investment in continuing and lifelong education has been identified. The staff should be constantly reminded that records are the expression of the care delivered, reflect the quality of care, and enable the guarantee of payment for the procedures performed.^{9,11} However, in addition to the importance of continuing and lifelong education, in a context of scarcity of resources, this strategy is the first target to be targeted for budget cuts.¹² For this reason, the importance of raising the awareness of managers in relation to this issue is reinforced.

The prescription is an important written communication link between the many professionals, and must contain minimum elements that guarantee the necessary efficiency to the care process.¹³ The prescribing professional has the entire responsibility to ensure that it is complete, with sufficient information for the multidisciplinary team.¹⁴ The prescription of level II wound treatment by the nurse is a duly substantiated by Resolution 358/2009, which addresses the Standardization of Nursing Care (SAE), and by the Resolution 501/2015, which regulates the competence of nurses for wound treatment.¹⁵⁻¹⁶

No significant change was identified in the nursing assessment, or to the detailed description of the procedure performed,¹⁷ which in terms of the wound treatment represents the description of several characteristics, such as: the site and aspect of the injury, the professional action, how it was classified, what resources were used, and how the patient responded to the treatment.¹⁸ A detailed description of the procedure is very important for the continuity of care, conferring quality to the clinical treatment.¹⁹

The significant increase in the number of prescriptions performed by nurses for level II wound

treatment, proportionally in relation to those prescribed by physicians, and reinforces the positive impact of the educational action, as physicians were not included in this intervention. The intensification of records on procedure execution, performed by nursing technicians and nurses, with a proportional reduction of the records without professional identification, reflects greater involvement of these professionals in this procedure, evidencing that the record of this action is now more valued by the team. This study corroborates that the nurse has been distinguished as a professional responsible for wound treatment, and is also responsible for training the nursing team, aiming for safe actions, without waste or rework.²⁰

A data crosschecking showed that some procedures were performed without prescription. In addition to the inability to bill for these procedures, this attitude can also denote emphasis of the focus on “to do”, to the detriment of “to record”, contributing to nursing invisibility.²¹ A study conducted in a private hospital in Rio de Janeiro identified that failures in documentation related to the lack of nursing annotation, resulted in denials of reimbursement, representing a cost of R\$ 16,085.28 to the institution.²² In this context, the nurse auditor should not only identify deficiencies in the records, with the main objective being the excellence of nursing care, but should also consider the traditional costs and hospital charges.²³

The importance of nurses knowing the entire process of the procedure billing and costs is mentioned in a study that considers nurses as a management tool, because they play an important role in the control and management of physical, human, material, and financial resources, in addition to their participation in strategic planning.⁶ The ignorance with regard to costs can lead to erroneous analyses on the expenses and often, as a consequence, inappropriate decision-making with regard to the current situations.²⁴

Thereby, in addition to the education of professionals working on billing and provision of care, knowledge on the costs of nursing procedures can contribute to improving the care records, thus decreasing hospital billing losses and reimbursement denials.²⁵

CONCLUSION

The educational action significantly contributed to an increase in the amount of prescriptions referring to the special level II wound treatment, increasing the hospital billing related to this procedure.

The use of the educational action strategy was determinant for motivation of nursing professionals to prescribe the procedure, which was sometimes performed without corresponding prescription, denoting a practice that contributes to nursing invisibility.

The trend of billing numbers, during 2015, demonstrates the importance of continuing and lifelong education, driven to develop new actions, applied to all professionals involved in care and in billing.

This study is expected to support others that demonstrate the contribution of nurses to hospital billing. Therefore, efforts must be made to improve the knowledge related to the billing of actions performed by nursing, as well as the managers' investment in continuing education actions.

ACKNOWLEDGEMENTS

To the Foundation for Research Support in the State of Goiás (FAPEG); and the Program for Strengthening in SUS.

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Received: July 29, 2016
Approved: August 10, 2017
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