Schneiders RE, Ronsoni RM, Sarti FM, Nita ME, Bastos EA, Zimmermann IR, Ferreira FF. Factors associated with the diffusion rate of innovations: a pilot study from the perspective of the Brazilian Unified National Health System. Cad Saúde Pública 2016; 32(9):e00067516.
doi:org/10.1590/0102-311XER011116

The journal has been informed about some errors in the paper. The corrections are follows:
A revista foi informada sobre alguns erros no artigo. As correções seguem abaixo:
La revista fue informada sobre algunos errores en el artículo. Siguen las correcciones:

- Where the text read:

Table 1

Selected pharmaceutical innovations incorporated in the Brazilian Program for Specialized Pharmaceutical Services (CEAF). Brazil, 2015.

Medicine	Incorporation date	Indication	Other treatments available at CEAF	Proportion of patients using innovative medicine * [month/period] (%)			
				1st t = 0	12th t = 4	24th t = 8	36th t = 12
Cyclophosphamide	Oct/2008	Acquired chronic pure red cell aplasia	Azathioprine, Cyclosporine, Immunoglubulin	0.0			
Deferasirox	Oct/2008	Chronic iron overload	Deferiprone, Deferoxamine	0.0	67.5	76.9	79.6
Everolimus	Oct/2008	Kidney transplant	Azathioprine, Cyclosporine, Methylprednisolone, Mycophenolate mofetil, Mycophenolate sodium, Sirolimus, Tacrolimus	0.0	0.1	1.2	1.9
Galantamine	Oct/2008	Alzheimer's disease	Donepezil, Rivastigmine	7.4	11.7	15.5	16.8
Aluminium hydroxide	Mar/2010	Hyperphosphatemia in chronic kidney insufficiency	Calcitriol, Sevelamer	0.0	0.0	0.0	0.0
Clobazam	Mar/2010	Epilepsy	Ethosuximide, Gabapentin, Lamotrigine, Primidone, Topiramate, Vigabatrin	0.0	5.1	3.7	4.5
Entecavir	Dec/2009	Hepatitis B	Adefovir, Interferon-alpha, Lamivudine, Tenofovir	0.0	21.8	30.0	
Sildenafil	Mar/2010	Pulmonary arterial hypertension	Iloprost	99.0	99.9	99.9	100.0
Natalizumab	Mar/2010	Multiple sclerosis	Azathioprine, Glatiramer, Interferon-beta	0.0	2.0	5.2	6.6
Pyridostigmine	Mar/2010	Myasthenia gravis	Azathioprione, Cyclosporine, Immunoglobulin	0.0	27.2	32.8	36.6

* Percentage in relation to the total number of patients treated for the disease at the CEAF for the same use.
Source: prepared by the authors, based on synthesis from Brazilian Health Informatics Department (DATASUS).

- It should read:

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Selected pharmaceutical innovations incorporated in the Brazilian Program for Specialized Pharmaceutical Services (CEAF). Brazil, 2015.

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				1st t = 0	12th t = 4	24th t = 8	36th t = 12
Cyclophosphamide	Oct/2008	Acquired chronic pure red cell aplasia	Azathioprine, Cyclosporine, Immunoglubulin	0.0	0.1	1.3	9.1
Deferasirox	Oct/2008	Chronic iron overload	Deferiprone, Deferoxamine	0.0	67.5	76.9	79.6
Everolimus	Oct/2008	Kidney transplant	Azathioprine, Cyclosporine, Methylprednisolone, Mycophenolate mofetil, Mycophenolate sodium, Sirolimus, Tacrolimus	0.0	0.1	1.2	1.9
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* Percentage in relation to the total number of patients treated for the disease at the CEAF for the same use.
Source: prepared by the authors, based on synthesis from Brazilian Health Informatics Department (DATASUS).

- Where the text read:

Table 2

Description and characterization of categories of independent variables for analysis of diffusion rate of pharmaceutical innovations in the Brazilian Unified National Health System (SUS). Brazil, 2015.

Category of variable		Value
1. Other treatments already available at the CEAF		Binary variable
Description	Analyzes the influence of preexistence of other medication available for treatment of the same disease at CEAF, which may facilitate access to pharmaceutical innovations due to previous knowledge of physicians and patients.	(Yes, No)
Method	Search in CEAF ordinances to identify other medication associated with ICD-10 correspondent to the specific disease targeted by the pharmaceutical innovation.	
2. Number of competitors for treatment of the same disease		Discrete variable
Description	Identifies the amount of competitor medications for the same line of treatment of the disease, influencing the probability of pharmaceutical innovation adoption.	(Count)
Method	Analysis of the first clinical PCDT available for the targeted disease. If no competitor medications are mentioned, the variable value was zero. Otherwise, the number of active principles competing for treatment of the same disease was computed.	
3. Line of treatment		Binary variable for each line of treatment
Description	Analyzes the influence of the line of treatment on diffusion rates, since medication in the last line of treatment, theoretically, should be prescribed to a smaller number of patients.	(1st line, 2nd line, 3rd line, or NA)
Method	Analysis of the first PCDT available for the targeted disease, in order to identify changes in line of treatment using another health technology (pharmaceutical or other) in case of refractoriness, fail or intolerance to standard treatment. If it was not possible to establish a line of treatment, the term "non-defined" was attributed.	
4. Medicine used in combination with other medication		Binary variable
Description	Verifies the influence of need to adopt a combined use of medication, due to potential difficulties to access other medicines prescribed.	(Yes, No)
Method	Analysis of the first PCDT available for the targeted disease, in order to identify indication of use in association with other medicines.	
5. Innovation within the SUS		Binary variable
Description	Analyzes the influence of incremental benefits of the pharmaceutical innovation in comparison to other types of treatment of the disease.	(Yes, No)
Method	Due to absence of specific definition regarding the concept of innovation in health care, the following premises were adopted: Medication for treatment of diseases not yet available at SUS; Medication for treatment of diseases already available that: Represents new line of treatment of the disease; or Presents improved efficacy in relation to other medication already available, based on search of evidences published in meta-analysis or direct comparison [20,21]. Other medications competing in the same line of treatment and in the same pharmacological category were not considered innovative.	
6. Time gap between from incorporation and clinical protocol publication (months)		Discrete variable
Description	Analyzes the influence of PCDT in diffusion rates, due to definition of prescription and utilization criteria.	(Count)
Method	Identification of the publication date of PCDT. If the PCDT was published prior to the medication incorporation, the variable value was zero.	
7. Treatment for infectious diseases		Binary variable
Description	Analyzes the influence of type of disease in diffusion rates of pharmaceutical innovations, considering that infectious diseases have limited time for treatment in comparison to other types of diseases.	(Yes, No)
Method	Assessment of characteristics of the targeted diseases, according to description in PCDT.	

(continues)

Table 2 (continued)

Category of variable		Value
8. Lag period after incorporation of the medicine (in trimesters)		Discrete variable (Count)
Description	Information used to estimate the diffusion rates over time (up to three years after incorporation).	
Method	Assignment of ordinal category corresponding to the number of trimesters after incorporation.	
9. Area of specialty in medicine		Binary variable for each area of medical specialty (Cardiology, Hematology, Infectious Disease, Rheumatology, Gastroenterology, Nephrology, Neurology)
Description	Analyzes the influence of the area of medical specialty of the disease on diffusion rates of pharmaceutical innovations.	
Method	Analysis of the PCDT for the targeted disease, in order to determine the area of medical specialty for treatment of the disease. Each disease was categorized in only one specialist area, if more than one area was indicated; the most representative specialist area was adopted.	
10. Medicine with patent (monopoly)		Binary variable (Yes, No)
Description	Analyzes the influence of the presence or absence of generic or similar drugs at the moment of incorporation, which presupposes the absence or presence of patent, respectively.	
Method	Search in the price list of the Chamber for Regulation of the Pharmaceutical Market, in order to identify generic or similar drugs in Brazil.	
11. Annual cost of drug therapy per patient		Continuous variable (Log R$)
Description	Analyzes the interference of drug therapy costs per patient in the diffusion rate and potential impacts of reduction in prices due to scale in production, considering that overall budget impact may influence the access to medication within the SUS.	
Method	Estimation of annual costs for standard treatment (in log), considering recommended dosage of the medication in the PCDT for the targeted disease, at the period of pharmaceutical innovation incorporation within the SUS. A standard patient profile weighting 70kg was adopted, in case of dosage per body weight. The annual costs were based on the amount of medication for annual treatment and the PMC (18%) from the Chamber for Regulation of the Pharmaceutical Market (2014).	
12. Higher price in comparison to pharmaceutical competitors		Binary variable (Yes, No, NA)
Description	Analyzes the influence of variations in price on the diffusion rate, in comparison with other technologies for drug therapy of the same disease already available at the SUS.	
Method	Comparison of the variable "annual cost of drug therapy per patient" in relation to the annual costs estimated for drug therapy of the targeted disease using other medication available within SUS. The annual costs were based on the amount of medication for annual treatment and the PMC (18%) from the Chamber for Regulation of the Pharmaceutical Market (2014). If there are no other therapeutic options for treatment of the disease, the variable value was "non applicable".	
13. Public management level responsible for acquisition of medication		Dummy variable for each government level (Ministry of Health, State Secretary of Health, or both)
Description	Assesses the impact of diverse patterns of acquisition of medication for CEAF (federal, and/or state level acquisition) on diffusion rates.	
Method	Identification of the public management level responsible for acquisition of the medication, through search in Ministry of Health ordinances that established the Component of Medications with Exceptional Dispensation (Ordinance GM/MS 2,577/2006), the CEAF (Ordinance GM/MS 2,981/2009), and other ordinances published for alteration or revocation of the previous ordinances and its annexes. Changes in responsibility during the period analyzed were categorized as "both".	
14. State of residence of patient		Binary variable for each Brazilian state
Description	Verifies differences among states of residence of patients in the access of medication provided by SUS or in execution of CEAF, and its influence on diffusion rates.	
Method	Extraction of data regarding patients' state of residence from SUS databases, described in Methods.	

(continues)

Table 2 (continued)

Category of variable		Value
15. Region of residence of patient		Binary variable for each Brazilian region
Description	Verifies differences among regions of residence of patients in the access of medication provided by SUS or in execution of CEAF, and its influence on diffusion rates.	
Method	Extraction of data regarding patients' region of residence from SUS databases, described in Methods.	
16. Long-term use medication		Binary variable (Yes, No)
Description	Analyzes the influence of period recommended for treatment on diffusion rate, considering that continuous-use medication usually presents lower adherence from patients.	
Method	Analysis of general recommendations regarding the period recommended for treatment using the medication in the PCDT for the targeted disease, at the period of pharmaceutical innovation incorporation within SUS. Long-term use medication was considered to be indicated for utilization during periods longer than one year of treatment. In the case of pharmaceutical innovations without published PCDT at the moment of incorporation, information contained in recent PCDT were adopted.	
17. Improvement in route of administration		Binary variable (Yes, No)
Description	Analyzes the impact of advantages in dosage scheme or route of administration of the pharmaceutical innovation in comparison to other medications already available for treatment of the same disease at CEAF.	
Method	Analysis of recommended dosage of the pharmaceutical innovation in comparison to other medication available, considering information of dosage per week or ease in route of administration. Advantages in route of administration were based on the following hierarchy: oral > subcutaneous or intradermic > intramuscular > intravenous (with the first options considered to be preferable to the latter ones).	

Binary variable: variable assuming values 0 or 1, according to the characteristics attributable to the case in analysis, indicating the effect of the characteristic described on the rate of adoption; CEAF: Brazilian Program for Specialized Pharmaceutical Services; ICD-10: 10th revision of the International Classification of Diseases; NA: non-applicable; PCDT: clinical protocol and therapeutic guideline; PMC: maximum price for consumers.
Source: prepared by the authors, based on synthesis of documental research at the Brazilian Ministry of Health.

- It should read:

Table 2

Description and characterization of categories of independent variables for analysis of diffusion rate of pharmaceutical innovations in the Brazilian Unified National Health System (SUS). Brazil, 2015.

Category of variable		Value
1. Other treatments already available at the CEAF		Binary variable
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Method	Search in CEAF ordinances to identify other medication associated with ICD-10 correspondent to the specific disease targeted by the pharmaceutical innovation.	
2. Number of competitors for treatment of the same disease		Discrete variable
Description	Identifies the amount of competitor medications for the same line of treatment of the disease, influencing the probability of pharmaceutical innovation adoption.	(Count)
Method	Analysis of the first clinical PCDT available for the targeted disease. If no competitor medications are mentioned, the variable value was zero. Otherwise, the number of active principles competing for treatment of the same disease was computed.	
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4. Medicine used in combination with other medication		Binary variable
Description	Verifies the influence of need to adopt a combined use of medication, due to potential difficulties to access other medicines prescribed.	(Yes, No)
Method	Analysis of the first PCDT available for the targeted disease, in order to identify indication of use in association with other medicines.	
5. Innovation within the SUS		Binary variable
Description	Analyzes the influence of incremental benefits of the pharmaceutical innovation in comparison to other types of treatment of the disease.	(Yes, No)
Method	Due to absence of specific definition regarding the concept of innovation in health care, the following premises were adopted: • Medication for treatment of diseases not yet available at SUS; • Medication for treatment of diseases already available that: A. Represents new line of treatment of the disease; or B. Presents improved efficacy in relation to other medication already available, based on search of evidences published in meta-analysis or direct comparison [20,21]. Other medications competing in the same line of treatment and in the same pharmacological category were not considered innovative.	
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Description	Analyzes the influence of PCDT in diffusion rates, due to definition of prescription and utilization criteria.	(Count)
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(continues)

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8. Lag period after incorporation of the medicine (in trimesters)		Discrete variable
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Method	Estimation of annual costs for standard treatment (in log), considering recommended dosage of the medication in the PCDT for the targeted disease, at the period of pharmaceutical innovation incorporation within the SUS. A standard patient profile weighting 70kg was adopted, in case of dosage per body weight. The annual costs were based on the amount of medication for annual treatment and the PMC (18%) from the Chamber for Regulation of the Pharmaceutical Market (2014).	
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(continues)

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Method	Extraction of data regarding patients' region of residence from SUS databases, described in *Methods*.	
16. Long-term use medication		Binary variable (Yes, No)
Description	Analyzes the influence of period recommended for treatment on diffusion rate, considering that continuous-use medication usually presents lower adherence from patients.	
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