

THE ROLE OF NURSES IN IUD INSERTION: AN ANALYSIS OF THE EVOLUTION IN CAMPO GRANDE/MS BETWEEN 2019 AND 2023

 <https://doi.org/10.56238/sevened2024.037-186>

Anáís Araújo de Lima¹ and Ana Patrícia Ricci².

ABSTRACT

Family planning is a right guaranteed by law and fundamental for individuals to be able to make informed decisions about their reproduction. In Brazil, the Unified Health System (SUS) plays a crucial role, offering access to contraceptive methods, including Intrauterine Devices (IUDs), which are long-acting reversible methods (LARC) with high efficacy. The copper IUD, for example, is valid for up to 10 years and is 99% effective. The insertion of the IUD can be performed by both doctors and trained nurses, a practice regulated by the Federal Nursing Council (COFEN), expanding access to this method, especially in regions with a shortage of doctors.

In Campo Grande (MS), training programs have trained nurses to insert IUDs, contributing to an increase in insertions, especially with the performance of resident nurses in the TEIAS project. This study aims to analyze the number of IUD insertions performed by physicians and nurses, highlighting the fundamental role of nurses and residency programs in promoting family planning in Primary Health Care.

The research is quantitative, based on secondary data from the Health Information System for Primary Care (SISAB) between the years 2019 and 2023. The results show the positive impact of IUD insertion by nurses in increasing access to contraceptive methods, reflecting the progress in reproductive planning in the SUS.

Keywords: Contraceptive methods. IUD. Training of nurses. Multiprofessional residency. Nursing. Family planning.

¹ Resident Nurse in Family Health
FioCruz

² Master of Science in Nursing
Federal University of Mato Grosso do Sul



INTRODUCTION

The right to reproduction is guaranteed by law and ensures that every individual can make their reproductive choices in a free and informed manner. For this right to be effective, it is necessary that everyone has access to safe and provided information, as well as to the means and methods available to contraception. In this context, family planning emerges as a fundamental instrument to support these decisions, ensuring that people can achieve their reproductive goals (BRASIL, 1996).

Brazil's Unified Health System (SUS) plays a crucial role in making conscious decisions about reproduction and birth control available to the population and supporting them. Family planning, inserted in the context of primary health care, is an essential service offered by the public network, which seeks to ensure that all citizens can access contraceptive methods in a safe and effective way (BRASIL, 1998).

The main components of family planning include education and information about available methods, free access to different types of contraceptives, personalized counseling to assist with reproductive decisions, and the provision of reproductive health services, such as screening and prenatal care. In addition, primary care acts in the prevention and treatment of infertility and sexually transmitted infections, in addition to providing psychosocial support when necessary (BRASIL, 2018).

Among the contraceptive methods offered by the SUS, the copper Intrauterine Device (IUD TCu 380A) stands out, considered a long-acting reversible method (LARC), with a validity of up to 10 years and an efficacy of 99% (BRASIL, 2018). IUD insertion can be performed by trained doctors or nurses, a practice regulated by specific guidelines in Brazil (COFEN, 2022).

Reproductive planning is a right guaranteed by law to all Brazilians. Among the services offered by the Unified Health System (SUS) is contraceptive care, with access to and choice of contraceptive methods considered an essential activity (BRASIL, 1996). To strengthen this right, the Ministry of Health launched in 1998 the "Technical Manual for Family Planning Assistance", which highlights the importance of family planning and provides guidance on appropriate management. The document also underlines the role of health professionals in knowing all contraceptive options and in adequately informing users, encouraging active participation in the choice of method.

Therefore, family planning, when well implemented, promotes reproductive health, improves the quality of life of individuals and families, and allows everyone to exercise their reproductive rights in an informed and safe manner (BRASIL, 2002).



According to IBGE data from 2019, among women aged 15 to 49 who were still menstruating and sexually active in the previous 12 months, 22.9% used some sterilization method (17.3% tubal ligation and 5.6% vasectomy), 4.4% opted for the IUD, 9.8% used injections, 40.6% preferred the contraceptive pill, 20.4% used male condoms, 0.6% used other modern methods (such as female condoms, ring, adhesive) and 1.2% used traditional methods (such as table or coitus interruptus).

It is observed that the contraceptive method used varies according to the age group. Among women aged 15 to 24 years, 51.0% use the contraceptive pill, 17.2% use injections and 26.5% opt for condoms. Among those aged 25 to 34, sterilization methods begin to appear with 15.2% prevalence and the IUD with 5.4%. In the 35 to 49 age group, 38.7% of women underwent tubal ligation or had partners who underwent vasectomy (IBGE, 2021).

Currently, SUS offers a variety of temporary and reversible contraceptive methods, such as combined pills, mini-pills, monthly and quarterly injectables, female and male condoms, diaphragms, emergency contraceptives, and the copper Intrauterine Device (IUD TCu-380) (Brasil, 2018).

Family planning in Primary Health Care is an essential service offered by the public network, playing a fundamental role in the SUS in Brazil. Through this system, the population receives support and resources to make informed choices about reproduction and birth control. The main components of family planning PHC are: Education and Information; Access to Contraceptives; Personalized Advice; Reproductive Health Services

This comprehensive approach ensures that the population has access to information, services, and support to make safe and informed reproductive choices.

IUD placement can be done by both doctors and trained nurses, and is not an exclusive practice of specialists, nor is it conditional on the performance of complementary exams (BRASIL, 2018).

IUD insertion by trained nurses can be a strategy to expand access to long-acting contraceptive methods, especially in areas where there is a shortage of doctors (BRASIL, 2013).

In Brazil, IUD insertion by nurses is regulated by the Federal Council of Nursing (COFEN), which defines the invasive procedures of technical competence of these professionals. The practice is supported by Law 7,498/86, which regulates the practice of nursing, by Technical Opinion No. 17/2010/CTLN/COFEN, by COFEN Resolution 690/2022 and by Technical Note 31/2023 of the Ministry of Health. This expands access to the contraceptive method for SUS users, since trained nurses can also perform the insertion of the IUD.



To comply with COFEN regulations, nurses must undergo training that includes a 70-hour theoretical-practical course and the insertion of 20 IUDs under the supervision of a trained nurse, during nursing consultations (COFEN, 2022).

In Campo Grande, the capital of Mato Grosso do Sul, the city where data was collected, there are specific programs that train nurses for IUD insertion. Offered by the Municipal Health Department, Regional Nursing Council and Graduate Programs.

In the state capital, 72 Health Units are established, which are UBS (Basic Health Units) and USF (Family Health Units), with doctors and nurses in the care of the population. Among these, 12 units house residents in Family and Community Medicine and the SESAU/Fiocruz Multiprofessional Family Health Program, through the TEIAS project (Integrated Territories of Health Care) which is an initiative that seeks to qualify and expand primary health care (PHC) in the SUS. Developed in partnership between Fiocruz, SESAU and other agencies, it focuses on the reorganization of health services in the territory, promoting integrality, equity and universality in care.

Its implementation aims to strengthen the Family Health Strategy (FHS) in specific areas, such as Manguinhos in Rio de Janeiro, and in other cities, such as Campo Grande/MS. This includes strategies such as expanding FHS coverage to 100% of the target territory, integration with teaching and research, and the inclusion of innovative practices and reducing unnecessary referrals to secondary care.

(<https://fiocruz.teiascampogrande.com.br/institucional/>), this partnership has the annual admission of 72 doctors and 44 nurses linked to this residency program through a selection process.

In this sense, this article aims to analyze the records referring to the insertion of the intrauterine device performed by nurses and physicians in Primary Health Care in Campo Grande, before and after the beginning of the residency in Family Health SESAU/Fiocruz.

OBJECTIVES

The objective of this study is to analyze the number of Intrauterine Device (IUD) insertions performed in the city of Campo Grandes, MS, between 2019 and 2023.

METHODOLOGY

This study with a quantitative, cross-sectional and descriptive approach, conducted based on secondary and public domain data extracted from the Health Information System for Primary Care – SISAB (<https://sisab.saude.gov.br/>). SISAB is a platform and can be defined as a resource used to identify data related to primary care procedures and services,



with the purpose of transforming them into reliable information necessary to contribute to the decision-making process of health organizations at the federal, state and municipal levels, as well as to health education bodies (BRASIL, 2013).

The Health Information System for Primary Care (SISAB) was established in 2013 by Ordinance GM/MS No. 1,412. It is the current information system to subsidize financing and adherence to the programs and strategies of the National Primary Care Policy (PNAB). SISAB is part of the strategy of the Department of Family Health (DESF/SAPS/MS), called e-SUS Primary Care (e-SUS APS), which aims to improve information management, automate processes, improve infrastructure conditions and optimize workflows in Primary Care. <https://sisab.saude.gov.br/>

The collection of information was carried out in July 2024 following the following search criteria: access to the SISAB website, Health Production tab; Geographic Unit: Municipality: Campo Grande; Competence: selection of the period from January to December 2019 to 2023, separating into groups of 12 months and at the end adding the result of the total of them; in the Report Row: selected Professional Category; in the column of the selected Report, the Procedure: CIAP/CID; in the filters we selected – Team Type: Eq.de Family Health; Category: Nurse and Doctor, separately. Place of Service: UBS, so in the stage called Type of Production we used the International Classification of Primary Care (ICPC) code, the W12 code was selected, which covers Intrauterine Contraception/Intrauterine Device/IUD. The data were generated by the website itself with on-screen visualization and download in an Excel spreadsheet.

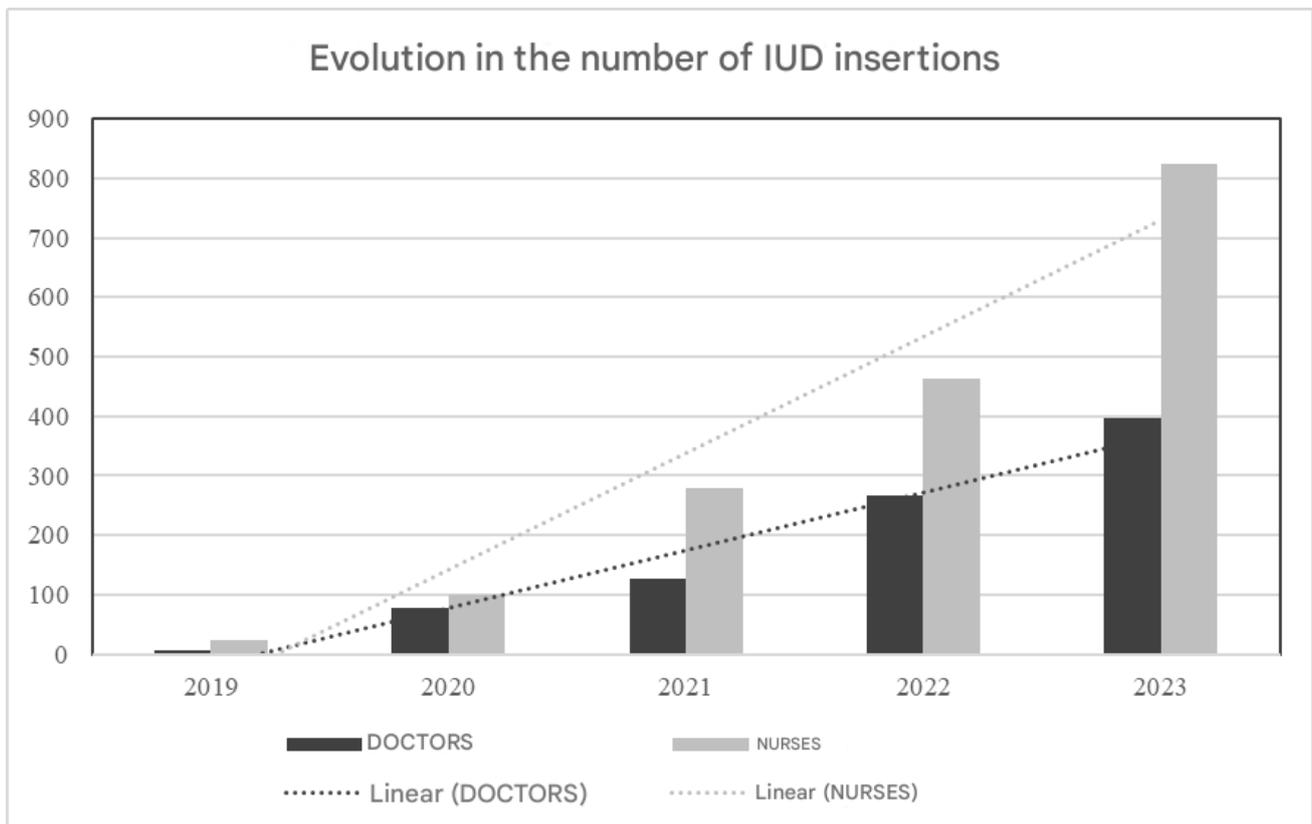
The simple relative frequency analysis technique was used, which makes it possible to explore the data using the quotient between the absolute frequency of the variable and the total number of observations. Tables and graphs generated in Excel were also used to assist in the visualization and analysis of the information produced.

RESULTS AND DISCUSSIONS

The study seeks to demonstrate the significant increase in the insertion of Intrauterine Devices (IUDs) over the last five years, as shown in Chart 1 and Graph 1, which analyzes the factors that contributed to this growth, with special emphasis on the essential role of the nursing professional in this context.

TABLE 1

	2019	2020	2021	2022	2023	TOTAL
DOCTORS	07	77	127	266	396	873
NURSES	24	99	279	464	824	1.690
TOTAL	31	176	406	730	1.220	2.563



The analysis of the growth in IUD insertions by nurses between 2019 and 2023, highlighting the impact of Multiprofessional Residency and subsequent training, reveals notable advances in terms of access to contraceptive methods and family planning in the Unified Health System (SUS). By looking at the data, we can see the following:

In 2019, residency programs had not yet been implemented, the number of IUD insertions was low, with 31 insertions registered. This scenario reflects a context in which access to the IUD was restricted, with a lack of trained professionals in some regions and a greater dependence on doctors to perform the procedure. The shortage of trained nurses limited the expansion of access, especially in areas lacking doctors.

In 2020, the start of the multiprofessional residency coincided with the COVID-19 pandemic, which brought unexpected challenges, including restrictions on face-to-face care. During this period, nurses from the health network began to perform IUD insertions, applying the knowledge acquired in courses and training. However, the pandemic made it difficult to pace face-to-face training and continue training programs, somewhat limiting the expansion of the number of insertions.

In 2021, even with the ongoing pandemic scenario, the first training course for resident nurses for IUD insertion was held. This milestone is important, considering that resident nurses began to be trained in a structured way, gaining technical competence and increasing the capacity to insert IUDs. The number of insertions rose from 279 in 2021,



which represented a significant increase, of approximately 64.69% compared to the previous year, although still below the desired.

In 2022, COFEN Resolution No. 690/2022 also incisively regulated the practice of IUD insertion by nurses, which generated a significant improvement in the quality and safety of the procedure. The number of insertions jumped to 464, which represents an increase of approximately 66.3% compared to 2021. This growth is proof of the effectiveness of training and strengthening the performance of nurses, especially considering that they have become increasingly recognized as essential professionals in the promotion of family planning.

In 2023, with continuous training and the maturation of the residency model, the number of insertions skyrocketed to 1,220. This represents a significant increase of 170% compared to 2021, evidencing not only the positive performance of nurses in the implementation of contraceptive methods, but also the impact of the interprofessional strategies adopted by programs such as the multiprofessional residency, such as the Teias Project. With this expansion, health facilities have been able to reach a much larger number of women, offering long-acting contraceptive options and improving the reproductive autonomy of the population.

The increase in IUD insertions over these five years, with a positive variation of approximately 3,935% from 2019 (31 insertions) to 2023 (1,220 insertions), highlights the strategic importance of training nurses and strengthening multiprofessional residency in the SUS. These data show that, by training nurses, it was possible to expand access to contraceptive methods, especially in areas with a shortage of doctors, and to decentralize the supply of services, promoting equity in access to reproductive health.

In summary, training initiatives and the expansion of the role of nurses in family planning not only increased the coverage of contraceptive methods, but also strengthened women's autonomy in their reproductive choices, directly reflecting on the promotion of sexual and reproductive health in Brazil.

The discussion about IUD insertion by nurses and the impact of programs such as the Multiprofessional Residency (through the Teias Project) on reproductive planning reflects a significant advance in access to long-acting contraceptive methods and in the promotion of reproductive health, in line with the legislation and guidelines of the SUS.

Law No. 9,263/1996, which regulates family planning, ensures the right of Brazilian women to access contraceptive methods, recognizing the importance of reproductive autonomy. This legislation has been fundamental for the expansion of health services aimed at guiding and choosing the most appropriate methods, including temporary methods



such as the pill and the Intrauterine Device itself, but also definitive methods such as tubal ligation. Data from the IBGE reveal that the choice of contraceptive methods varies according to the age group, with younger women preferring temporary methods and older women, definitive methods. The IUD, although it still represents a small portion of the choices, stands out as an effective and long-lasting option, which makes it an excellent choice within the SUS, especially for its 99% effectiveness.

The practice of IUD insertion by nurses was regulated by the Federal Council of Nursing (COFEN), which expanded the performance of these professionals in the field of reproductive health. This not only contributes to increased access to the method, but also relieves the burden on doctors, especially in areas where there is a shortage of these professionals. The required training, with 70 hours of theoretical and practical training and supervision in 20 insertions, ensures that the procedure is performed safely and effectively, benefiting users and offering a reversible and highly effective contraceptive method.

Programs such as the Multiprofessional Residency (Teias Project) have been crucial for interprofessional training and for the improvement of reproductive health care. The Teias Project, focused on the integration between different health professions, has allowed nurses, doctors and other professionals to act collaboratively, strengthening family planning actions in health units. In Campo Grande, the implementation of these programs had a significant impact, with the presence of 44 resident nurses since their inception in 2019, multiplying reproductive health actions and gradually expanding service coverage.

The inclusion of IUDs in health units has been one of the most effective strategies to increase access to long-acting contraceptive methods, especially in the 72 health units of Campo Grande. The training of nurses and the deconcentration of dependence on doctors have been fundamental to ensure that more women have access to the IUD, especially in the regions most in need of medical professionals. The improvement in guidance on family planning also reflects the positive impact of these public policies, which are promoting greater reproductive autonomy and equity in access to services.

CONCLUSION

Training nurses for IUD insertion within the scope of the Teias Project proved to be an effective strategy to increase access to contraceptive methods, improve the efficiency of the health system and maintain an acceptable level of quality in the services provided.

The integration of services and the training of professionals aim to improve the quality of health care. Nurses trained to insert IUDs can provide more complete and accessible care to women, contributing to the autonomy and well-being of patients.



The conclusion on the training of nurses for IUD insertion within the scope of the Multiprofessional Residency Program (Teias Project) shows that this strategy was **fundamental to expand access to long-term contraceptive methods**. By training nurses, it was possible to **decentralize care**, making **family planning** more accessible and efficient for a greater number of women.

This approach has not only **improved the efficiency of the health system**, but has also maintained a **high level of quality in the services** provided, given that trained nurses are able to perform the procedure safely, following protocols that ensure the well-being of patients. In addition, training contributes to strengthening women's **reproductive autonomy**, enabling them **to make more informed decisions** about their family planning.

The **integration of services** and the continuous training of professionals have shown significant results in terms of **the quality of health care**, allowing the SUS to offer a **more complete and accessible service**. This is reflected in the significant increase in IUD insertions in recent years, a direct reflection of the collective effort to improve **sexual and reproductive health** in Brazil.

The analysis of the results shows the success of the strategies implemented:

1. Expanded Coverage: The presence of residents in health facilities has allowed for a significant expansion in IUD insertion and guidance on family planning.
2. Reduction of Medical Dependence: The training of nurses for IUD insertion has been an effective solution for reducing dependence on doctors, especially in areas with a shortage of professionals.
3. Strengthening the SUS: The initiatives have strengthened the SUS, promoting not only access to the IUD, but also equity in care, with a focus on promoting women's reproductive health.

These actions represent an advance in the Brazilian public health system, in line with SUS guidelines and the health needs of the population. The interprofessional training model, with emphasis on the continuing education of nurses, has been shown to be essential to ensure the quality and safety of procedures, in addition to ensuring access to contraceptive methods for a growing number of women across the country.

The continuity and expansion of these projects is key to achieving more inclusive and efficient reproductive health, especially in regions where the shortage of doctors represents a constant challenge.



REFERENCES

1. Brasil. Ministério da Saúde. Secretaria de Políticas de Saúde. Área Técnica de Saúde da Mulher. (2002). Assistência em planejamento familiar: Manual técnico (4a ed.). Brasília: Ministério da Saúde.
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Programáticas Estratégicas. (2018). Manual técnico para profissionais de saúde: DIU com cobre TCU 380A. Brasília: Ministério da Saúde.
3. Brasil. (1996). Lei nº 9.263, de 12 de janeiro de 1996. Regula o § 7º do art. 226 da Constituição Federal, que trata do planejamento familiar, estabelece penalidades e dá outras providências. Diário Oficial da União: Brasília, DF, 13 Jan. 1996. Retrieved from http://www.planalto.gov.br/ccivil_03/leis/l9263.htm. Accessed on: September 22, 2024.
4. Conselho Federal de Enfermagem. (2022). Resolução COFEN nº 690, de 20 de setembro de 2022. Regulamenta a prática de inserção de Dispositivo Intrauterino (DIU) por enfermeiros e estabelece os requisitos para a capacitação. Diário Oficial da União: Brasília, DF, September 22, 2022. Retrieved from <https://www.cofen.gov.br>. Accessed on: May 20, 2024.
5. Brasil. (1986). Lei nº 7.498, de 25 de junho de 1986. Dispõe sobre a regulamentação do exercício da enfermagem e dá outras providências. Diário Oficial da União: Brasília, DF, June 26, 1986. Retrieved from <https://www.planalto.gov.br>. Accessed on: September 22, 2024.
6. Conselho Federal de Enfermagem. (2010). Parecer de Câmara Técnica nº 17/2010/CTLN/COFEN. Orienta sobre a atuação do enfermeiro na inserção e retirada do Dispositivo Intrauterino (DIU). Brasília, 2010. Retrieved from <https://www.cofen.gov.br>. Accessed on: May 18, 2024.
7. Sandenberg, L. F. (2022). Pandemia de COVID-19 afetou mulheres desproporcionalmente nas Américas, aponta relatório da OPAS. Nações Unidas Brasil [Internet]. March 10, 2022 [cited July 19, 2022]; Saúde: [about 3 screens]. Retrieved from <https://brasil.un.org/pt-br/174497-pandemia-de-covid-19-afetou-mulheres-desproporcionalmente-nas-americas-aponta-relatorio-da>. Accessed on: May 18, 2024.
8. Instituto Brasileiro de Geografia e Estatística. (2021). Pesquisa Nacional de Saúde: 2019: ciclos de vida: Brasil / IBGE, Coordenação de Trabalho e Rendimento. Rio de Janeiro: IBGE. Retrieved from <https://campograndems.labinovaapsfiocruz.com.br/osa/>. Accessed on: May 20, 2024.
9. Brasil. Ministério da Saúde. (1998). Manual técnico de assistência em planejamento familiar. Brasília: Ministério da Saúde.
10. Brasil. Ministério da Saúde. (2018). Cadernos de Atenção Básica, n. 29: Saúde sexual e saúde reprodutiva. Brasília: Ministério da Saúde.
11. Conselho Federal de Enfermagem. (2022). Resolução COFEN nº 690, de 31 de agosto de 2022. Normatiza a atuação do enfermeiro na inserção do Dispositivo Intrauterino (DIU). Diário Oficial da União: Brasília, DF, September 1, 2022.



12. Brasil. Ministério da Saúde. (2013). Saúde sexual e saúde reprodutiva [Internet]. Brasília: Ministério da Saúde. Retrieved from https://bvsmms.saude.gov.br/bvs/publicacoes/saude_sexual_saude_reprodutiva.pdf. Accessed on: May 31, 2023.
13. Costa, A. C., & Beltrami, J. (2019). Inserção de dispositivo intrauterino por enfermeiros: uma estratégia eficaz na ampliação do acesso a métodos contraceptivos. *Revista Brasileira de Enfermagem*, 72(1), 58-65.
14. Rivera, M. A., Garcia, L. E., & Martinez, J. P. (2020). Expansão do papel do enfermeiro na inserção de DIU: uma revisão de práticas seguras na América Latina. *International Journal of Nursing Studies*, 57, 101-109.
15. Ministério da Saúde do Brasil. (2019). Contracepção de longa duração no SUS: uso do DIU como opção de método eficaz e duradouro. *Saúde Pública*, 53(2), 289-298. Retrieved from https://bvsmms.saude.gov.br/bvs/publicacoes/contracepcao_longa_duracao_sus.pdf.