

TeleCepred: user admission model at a Specialized Rehabilitation Center via the Telehealth Bahia platform

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Abstract

The State Center for Prevention and Rehabilitation of People with Disabilities is a unit of the Unified Health System that works to rehabilitate people with disabilities. The admission of users took place in person, however considering the challenges related to the movement of people with disabilities, and the advent of the pandemic, the institution implemented TeleCepred, a user admission model that uses specialized teleconsulting, available on the telehealth platform. **Objective:** To describe the implementation process of TeleCepred, a model for admitting users via specialized teleconsulting. **Method:** the implementation process occurred in three cycles: cycle 01 "installation", which prepared the unit for operation; cycle 02 "migration", in which the admission of users occurred in a hybrid manner (in-person and online); and cycle 03 "consolidation", in which admission occurred exclusively via the telehealth platform. **Results:** in the first year of implementation, 3,386 teleconsultations were answered, 553 (16.4%) in cycle 01 and 2833 (83.5%) in cycle 02. All macro-regions in the state of São Paulo sent teleconsultations to the institution. **Conclusion:** The new admission model through TeleCepred represents a tool with significant potential for qualifying access for people with disabilities.

Keywords: Telehealth; Rehabilitation Services; Teleconsulting.

Resumen

TeleCepred: modelo de ingreso de usuarios a un Centro de Rehabilitación Especializado a través de la plataforma Telesalud Bahía

El Centro Estatal para la Prevención y Rehabilitación de Personas con Discapacidad es una unidad del Sistema Único de Salud que trabaja en la rehabilitación de personas con discapacidad. El ingreso de usuarios se realizó de manera presencial, sin embargo, considerando los desafíos relacionados con la circulación de personas con discapacidad y el advenimiento de la pandemia, la institución implementó TeleCepred, un modelo de ingreso de usuarios que utiliza teleconsultas especializadas, disponible en la plataforma Telesalud. **Objetivo:** Describir el proceso de implementación de TeleCepred, un modelo de admisión de usuarios a través de teleconsultoría especializada. **Método:** Este estudio es de carácter transversal, retrospectivo y descriptivo, basado en datos de fuentes institucionales y del sistema de plataforma Telesalud/BA. **Resultados:** El proceso de implementación se desarrolló en tres ciclos: ciclo 01 "instalación", que preparó la unidad para su operación; ciclo 02 "migración", en que el ingreso de usuarios se produjo de forma híbrida; y ciclo 03 "consolidación", en el que el ingreso se produjo exclusivamente a través de la plataforma. En el primer año de implementación se respondieron 3.386 teleconsultas, 553 (16,4%) en el ciclo 01 y 2.833 (83,5%) en el ciclo 02. Todas las macrorregiones del estado enviaron teleconsultas a la institución. La mayoría de las solicitudes fueron enviadas por médicos (42,3%) seguidos de enfermeros (35,3%). **Conclusión:** El nuevo modelo de admisión a través de TeleCepred representa una herramienta con importante potencial para calificar el acceso de personas con discapacidad.

Palabras-clave: Telesalud; Servicios de rehabilitación; Teleconsultoría.

Resumo

TeleCepred: modelo de admissão de usuários em um Centro Especializado em Reabilitação via plataforma Telessaúde Bahia

O Centro Estadual de Prevenção e Reabilitação da Pessoa com Deficiência é uma unidade do Sistema Único de Saúde que atua na reabilitação da pessoa com deficiência. A admissão de usuários ocorria de forma presencial, contudo considerando os desafios relacionados a deslocamento da pessoa com deficiência e o advento da pandemia, a instituição implantou o TeleCepred, modelo de admissão de usuários que utiliza a teleconsultoria especializada, disponível na plataforma Telessaúde. **Objetivo:** Descrever o processo de implantação do TeleCepred, modelo de admissão de usuários via teleconsultoria especializada. **Método:** Este estudo é de natureza transversal, retrospectivo e descritivo com base em dados de fontes institucionais e do sistema da plataforma Telessaúde/BA. **Resultados:** O processo de implantação ocorreu em três ciclos: ciclo 01 "instauração", que preparou a unidade para o funcionamento; ciclo 02 "migração", em que a admissão de usuários ocorreu de forma híbrida; e ciclo 03 "consolidação", em que a admissão ocorreu exclusivamente via plataforma. No primeiro ano de implantação foram respondidas 3.386 teleconsultorias, sendo 553 (16,4%) no ciclo 01 e 2.833 (83,5%) no ciclo 02. Todas as macrorregiões do estado enviaram teleconsultorias para a instituição. A maioria das solicitações foi encaminhada por médicos (42,3%) seguido de enfermeiros (35,3%). **Conclusão:** O novo modelo de admissão por meio do TeleCepred representa uma ferramenta de potencial significativo para qualificação do acesso da pessoa com deficiência.

Palavras-chave: Telessaúde; Serviços de Reabilitação; Teleconsultoria.

INTRODUCTION

The State Center for Prevention and Rehabilitation of Persons with Disabilities (Cepred-Centro Estadual de Prevenção e Reabilitação da Pessoa com Deficiência), a reference center linked to the Bahia State Health Department (Sesab-Secretaria de Saúde do Estado da Bahia), is a unit of the Unified Health System (SUS-Sistema Único de Saúde) that works in the rehabilitation of persons with disabilities (PWD). It is part of the state's Care Network for Persons with Disabilities (RCPD-Rede de Cuidados da Pessoa com Deficiência)¹ and is accredited as a Specialized Rehabilitation Center III (CER III), as it provides care to people with physical, hearing and intellectual disabilities. It also provides orthoses, prostheses, mobility aids (OPM), and ostomy bags. It also acts as a field for internships, studies, and scientific research, in addition to providing in-service training for other units of the Health Care Network (RAS-Rede de Atenção à Saúde), enabling the exchange of experiences and qualification of care².

Since its creation in 1999, Cepred has understood that disability is not just a health issue but is related to the environment and the attitudes of the community and family towards people with disabilities. Its rehabilitation model considers people with disabilities as protagonists of their rehabilitation process, to achieve the best physical, mental, functional, and social level and achieve the goals and objectives they have set. The team works to encourage users to perceive their potential and abilities, strengthening their autonomy and independence².

Throughout its existence, Cepred, as a statewide center, has faced constant challenges in the work processes related to the admission of users to the unit. The previous admission model, called "Guidance Group (GO)", was carried out in person, in which health professionals formed groups of up to 15 people to provide institutional guidance and then, individually, analyzed their eligibility. In this model, the user or their representative traveled from their homes to register at the unit and be scheduled for a consultation with a multidisciplinary team³.

The process of moving people with disabilities is generally not a simple task, especially when considering urban and interurban accessibility is still a challenge for many cities. Considering that approximately 50% of users admitted to Cepred each year are residents of the interior of Bahia³, situations of great vulnerability were observed in the transfers of these individuals, in addition to the costs generated for the public treasury.

Based on this scenario, the workers proposed reflections on the admission method to favor and qualify the access of people with disabilities to RCPD assistance points and promote actions to strengthen the organization of this network. Together with this moment, the context of the pandemic caused by the new coronavirus (SARS-CoV 2), which imposed social distancing on society as one of the methods of reducing the transmissibility of the virus and protecting life at that time, intensified the need for rapid changes in institutions given the new reality imposed worldwide⁴.

In this sense, actions to combat the pandemic were implemented in the state, contributing to the high pent-up demand and a significant increase in the

number of people registering for institutional care. During this period, users were seen arriving at the institution the night before or during the early hours of the morning to ensure registration at the unit. This context was a cause for institutional concern since quality and humanized access to the services offered is a prerogative in the care of people with disabilities. This highlighted the unsustainability of the in-person model of user admission, with the urgent need for changes in workflows and processes³.

Therefore, given the significant increase in the use of Digital Information and Communication Technologies (DICT) as a strategy to face challenges that permeated the health system during the pandemic, including access with several positive impacts on care and work processes and observing the experience of other reference centers in the state with the use of DICT in health, the Telehealth Bahia platform is a viable strategy to solve this context⁴.

Telehealth Brazil Network was a program created by Ordinance GM/MS number 2,546, on October 27, 20115, to offer telehealth services in the country. In Bahia, this initiative is carried out by the Telehealth Scientific Technical Center (NTC-BA-*Núcleo Técnico Científico de Telessaúde*), linked to the Directorate of Primary Care (DAB) of the state health department. Since its implementation in 2013, Telehealth Bahia has supported Primary Care (PC) professionals with clinical support, diagnosis, work organization, and continuing education, using information and distance communication technologies⁴.

In this sense, considering the demands for solutions with digital strategies for the continuity of care required by the COVID-19 pandemic, CIB resolution 107/2020 was approved, which establishes the Health Telesharing Program with Primary Care in the State of Bahia, which consists of a “strategy to resume, expand and strengthen the care offered by Primary Care in municipalities, during and after the Covid-19 pandemic, through the use of Information and Communication Technologies. This Resolution legitimizes the already developed offers of specialized teleconsultation and enables expansion with other specialized services”⁶.

Thus, considering that the RCPD covers Primary Care, specialized care in rehabilitation, and emergency hospital care, it is necessary to establish lines of care for the prevention of injuries as well as to carry out appropriate referrals, in addition to promoting the development of the social concept of disability and the continuous elimination of attitudinal, physical, technological barriers, among others, Cepred, in partnership with the Telehealth Technical Scientific Center, implemented TeleCepred. This tool uses the Telehealth platform to offer specialized teleconsulting and tele-education in the three areas of rehabilitation: physical, auditory, and intellectual.

The project was approved by the Bipartite Intermanagerial Committee (CIB-*Comissão Intergestores Bipartite*) through resolution 244/2021 and was named “TeleCepred: specialized teleconsultation in the care of people with disabilities”⁷. With the implementation of TeleCepred in 2021, users from all regions of the state began to be referred by Primary Care professionals from their territory without having to travel to the institution. To favor network operation and facilitate access, professionals from other Specialized Rehabilitation Centers (CER) and/or Single Rehabilitation Establishments (EUR), as well as maternity wards and public hospitals were also authorized to carry out referrals,

expanding the actions of the Telehealth Bahia platform.

OBJECTIVE

This article aims to describe the implementation process and preliminary results of “TeleCepred: specialized teleconsulting in the care of people with disabilities”, the new user admission model that uses specialized teleconsulting, available on the Telehealth Bahia platform, to receive referrals from the most diverse locations in the state for demands in rehabilitation of people with disabilities.

METHOD

This is a cross-sectional, retrospective, and descriptive study based on data from institutional sources and the Telehealth/BA platform system. The steps for implementing TeleCepred and the results of the first year of operation of the new admission model were described. The implementation process was divided into three cycles: establishment, migration, and consolidation. The quantitative data analyzed correspond to the number of teleconsultations responded, the requesting health macro-regions, and the demanding professional categories. The data were obtained from the Power BI system – Telehealth BA.

RESULTS AND DISCUSSION

To implement the new admission model via the Telehealth platform, the project management methodology was used as a tool to improve the efficiency and productivity of a project⁷. e in improving access to health services in remote communities.

Initially, the implementation team held meetings with the Telehealth Bahia team from October to December 2021 to understand how the platform works and how it could be useful in meeting institutional demands. The entire process was built through dialogue between the Telehealth team, the Strategic Actions and Planning Management Coordination (Cogesp) of Cepred, and other institutional sectors. It was necessary to understand the issue of rehabilitation of people with disabilities, the specificities of institutional functioning, in which access, for example, occurs through rehabilitation services and not by specialties, and how the Telehealth platform works to find the necessary paths to implement the proposal. The support of senior management from both teams was essential throughout the process.

The implementation process occurred gradually, in stages, called cycles. Three cycles were developed: cycle 01 - establishment; cycle 02 - migration and cycle 03 - consolidation (figure 01).

The first cycle, “establishment”, began in the second half of 2021 and its main objective was to prepare the unit for the operation of the new admission model. It involved organizing the physical and technological structure (appropriate room, installing computers, defining the team), preparing the necessary technical documents (protocols, folders, booklets), training the team on the Telehealth Bahia platform, and organizing internal and external dissemination strategies.

For internal dissemination, the seminar “TeleCepred: let’s talk about it?” was held, and attended

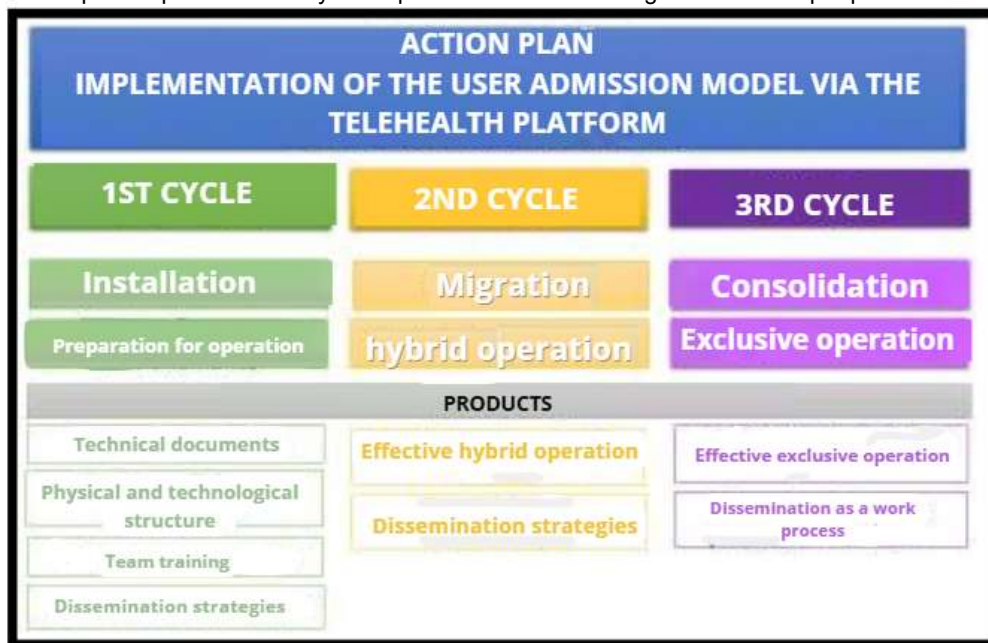
by 90% of the institution's employees. For external dissemination, web meetings were held with the 9 health macro-regions of the state of Bahia via the Telehealth Bahia platform. In addition, users or representatives who attended the institution received a newsletter with the changes in the admission model. The first cycle ended with the presentation of the project to the Bipartite Intermanagerial Commission, which approved it through resolution 244/2021⁸.

With the conclusion of this process, the second cycle, called "migration", began in the first half of 2022, with the main objective of carrying out admission in a hybrid manner, combining face-to-face service with the use of the platform, as it was essential for everyone involved to adapt: the institution's professionals, the requesting users, and professionals from other points of care in the network, who would act as spokespersons for user referrals.

This opportunity allowed the teleconsulting team to be familiarized with the platform and the new work processes; users to be informed about prospects; and the management team to assess the functioning of teleconsulting services based on data provided by the Telehealth platform, while meetings were held with other points in the network to disseminate the proposal. Halfway through this second cycle, the fluidity in the new admission process was already evident.

Considering the significant increase in the number of requests for teleconsultations from the most diverse locations in the state, mostly coming from primary care, demonstrating that the new admission model was being incorporated by health professionals, on July 4, 2022, the unit began the third cycle, called "consolidation". Its objective was to admit users exclusively through the Telehealth platform.

Figure 1. TeleCepred implementation cycles: specialized teleconsulting in the care of people with disabilities



The quantitative results regarding the characterization of teleconsultations received in 2022, the year of implementation of TeleCepred, will be described based on data from the Telehealth/BA system.

Graph 1. Number of teleconsultations answered by Cepred's teleconsultant team from 01/01/2022 to 12/31/2022

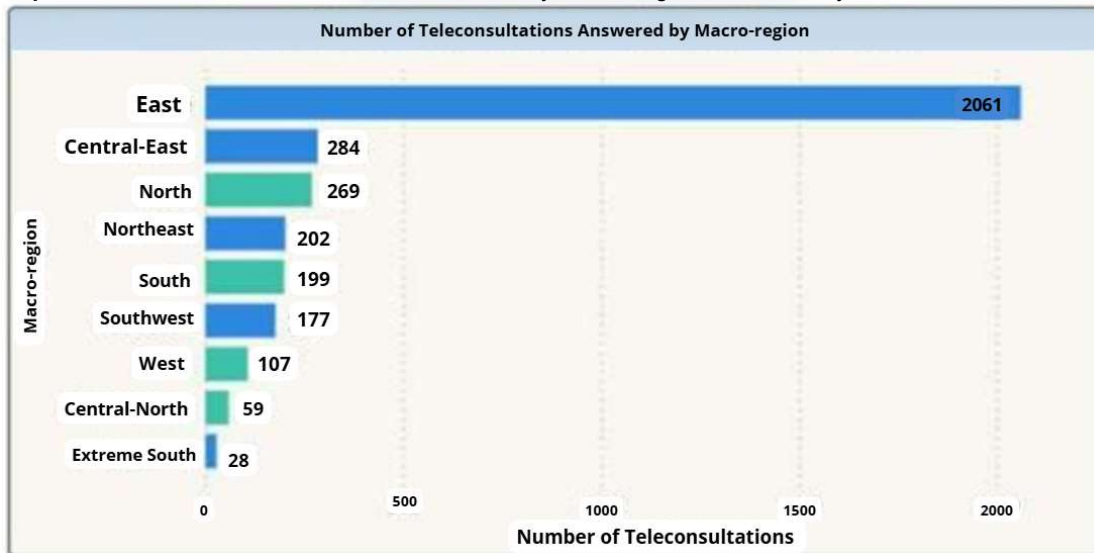


Source: Power BI – Telehealth BA, January 1, 2022 to December 31, 2022.

A total of three thousand three hundred and eighty-six (3,386) teleconsultations were answered, of which 553 (16.4%) were in cycle 01 (January to June) and the admission of users to the unit worked in a hybrid manner (in person and via the Telehealth platform). In cycle 2, there were 2,833 (83.5%) teleconsultations in which the admission of users began to occur exclusively via the platform (graph 1). Therefore, there was a significant increase in teleconsultations from cycle 02 onwards, demonstrating effectiveness in disseminating the proposal at the various points of care in the network.

Regarding the health macro-regions of Bahia state that requested teleconsultations (graph 2), all macro-regions carried out teleconsultations for Cepred in the period analyzed. The two health macro-regions with the most requests were the East, with 2,061 (60.8%) teleconsultations, and the Central East, with 284 teleconsultations (8.4%), as shown in the graph below. Cepred is located in the city of Salvador (BA) which belongs to the eastern region of the state. Probably due to the municipality proximity in this region to the capital of Bahia, there is a greater number of teleconsultations originating from this area.

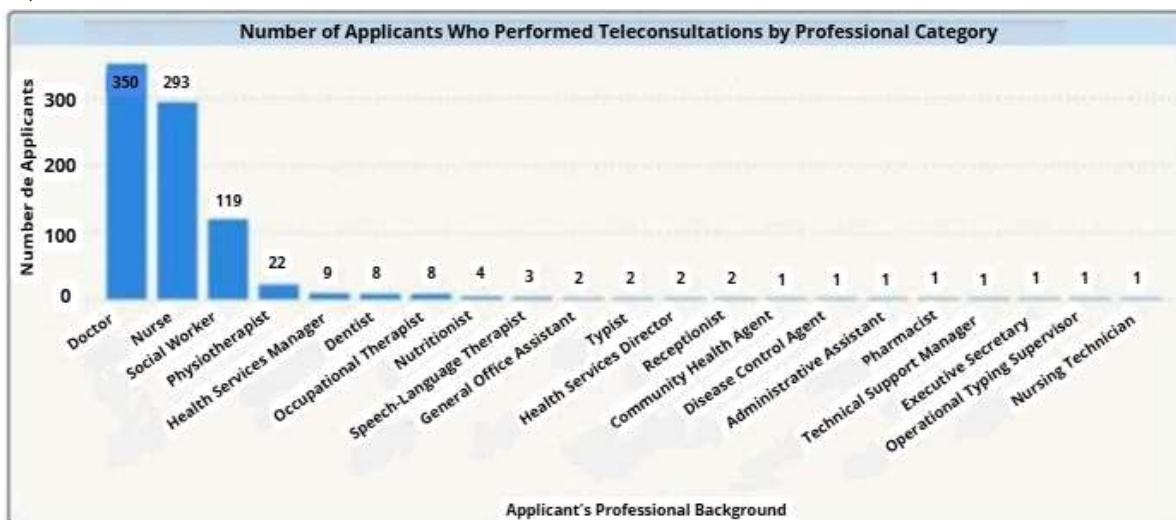
Graph 2. Number of Teleconsultations carried out by macro-region from January 1 to December 31, 2022.



Source: Power BI – Telehealth BA, January 1, 2022 to December 31, 2022.

Regarding the requesting professionals, 829 professionals performed teleconsultations in the period analyzed. Graph 3 shows the number of professionals who performed teleconsultations by professional category. We observed that 350 doctors (42.3%), 293 nurses (35.3%), and 119 social workers (14.3%) requested teleconsultations for Cepred. We found that in the first year of implementation, other professions that do not require higher education in health had their teleconsultations regulated for Cepred. However, considering that teleconsultation is intended to favor and strengthen dialogue between professionals from the most diverse areas of health care, primary and specialized care, applicants with a secondary education level or who were not from the health area had their registrations canceled.

Graph 3. Number of applicants who carried out teleconsultations by professional category from January 1 to December 31, 2022.



Source: Power BI – Telehealth BA, January 1, 2022 to December 31, 2022.

The experience of implementing the new user admission model through the Telehealth platform at Cepred is in line with the literature on telehealth⁵ and its ability to improve access to health services, especially in the care of vulnerable populations, such as people with disabilities. Using the platform as an access tool can reduce geographical barriers, reducing the need for users to travel, which generates financial benefits and reduces travel-related risks. In addition, studies show that Telehealth promotes greater coordination between primary care and specialized care, strengthening the comprehensiveness of care, and qualifies the referral process¹⁰.

Furthermore, the Telehealth platform improves the management of user flow, allowing the collection and analysis of data for planning and optimizing health services. In contexts such as the Care Network for People with Disabilities (RCPD), the use of digital platforms enables a broader and more strategic view of the care network, contributing to a situational diagnosis and guiding regionalization policies, as highlighted by Mendes in his studies on the integration and regionalization of health services¹¹.

CONCLUSION

The new admission model through TeleCepred represents a tool with significant potential for qualifying access by people with disabilities to rehabilitation services offered by CER III, in line with the principles and guidelines of the SUS. It also meets the National Policy for Specialized Health Care¹², which describes the adoption of telehealth as a strategy for access and qualification of care.

With data from the TeleCepred platform, it was possible to map the referrals made by applicants to care points in the macro-regions of the state of Bahia and, with this, support the understanding of the situational diagnosis of the services of the Care Network for People with Disabilities (RCPD), which contributed to the discussion of strategic actions and public policies aimed at people with disabilities that favor access to and strengthening of the Care Network for People with Disabilities in the state.

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Statement of Responsibility:

We, the authors of the work titled: “*TeleCepred: User Admission Model at a Specialized Rehabilitation Center via the Telehealth Bahia Platform*”, declare that all authors participated in the construction and development of this work.

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