# TELEDERMATOLOGY MUTIRON AT POLICLINICA BARRAL Y BARRAL IN RIO BRANCO – ACRE IN 2023

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Abstract: Dermatological diseases are one of the main causes of people seeking care in Primary Health Care (PHC), often being treated by non-specialized doctors, which leads to an increase in unnecessary referrals to dermatologists and an overload on specialized services. This scenario is, in part, caused by the limited academic training of professionals, affecting their ability to diagnose and treat dermatological conditions appropriately. Teledermatology appears as a promising solution to optimize care, using information and communication technologies to facilitate remote diagnosis, allowing PHC doctors to receive reports from dermatologists within 72 hours, without the need for unnecessary travel. Objective: To report the experience of the Teledermatology joint effort held at Policlínica Barral Y Barral in the municipality of Rio Branco in the State of Acre, aimed at reducing waiting times and improving access to dermatological care. Method: This is a literature review study in the form of a professional experience report with critical analysis. The data was collected from medical and administrative records that provided the necessary information to carry out the experience and its results. Results: During the joint effort, 200 PHC patients were expected, with 142 treated, 128 exams validated and 50 cases treated directly in PHC, avoiding unnecessary referrals. The results showed a predominance of injuries classified as green (secondary) and blue (primary care) risk, with some serious cases, such as skin cancer, being referred to specialized care. Conclusion:



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Teledermatology proved to be effective in speeding up diagnosis and treatment, improving the resolution of PHC and optimizing public resources. The experience highlighted the importance of training PHC professionals to diagnose and treat dermatological diseases, highlighting the need to integrate telemedicine into health practices, contributing to more efficient and accessible care.

Keywords: Dermatological diseases; Primary Health Care (PHC); Teledermatology.

### **INTRODUCTION**

Skin diseases represent one of the main reasons for seeking care in primary health care, and are often treated by physicians who are not specialists in dermatology (Bernardes et al., 2015).

Since dermatology finds a wide range of health conditions that vary greatly in complexity, it is observed that in the Unified Health System (SUS) many cases referred for specialized consultation could be resolved in Primary Health Care (PHC). This increases the waiting time for the consultation, occupies the specialty queue with cases that can be solved in PHC, can delay the start of treatments, causes unnecessary displacements and lower efficiency of public spending. (Telehealth/UFSC (2024).

This reality is due, in part, to the limited learning during the academic training of these professionals, which can negatively impact their ability to properly diagnose and treat these conditions. As a result, many patients end up being referred to dermatologists, which not only increases the burden on specialized services, but also increases the costs associated with treatment (Campos et al., 2022 apud Jessica Corrêa Pantoja, 2024, pg. 2).

Thus, teledermatology emerges as a promising alternative, using information and communication technologies to facilitate the exchange of medical information between nondermatologists and specialists. This approach, known as secondary teledermatology, offers the possibility of optimizing care, making it faster and less costly. In this way, Teledermatology focuses specifically on the diagnosis and treatment of dermatological conditions through Information and Communication Technologies (ICTs). "This approach uses tools such as videoconferencing, high-



resolution digital images, and electronic information exchange to enable interaction through a platform" (YARAK, RUIZ, and PISA, 2017, P. 3).

Within 72 hours, dermatologists evaluate the cases and provide reports to the requesting doctors. In addition, they classify lesions by risk level and guide management, determining whether the patient should be treated exclusively in PHC or should be referred to specialized care to continue treatment, as in the case of cancer, for example.

For cases referred, the risk classification allows, through the regulation service, a faster resolution of serious cases. Teledermatology - Telehealth UFSC (2024). The classification is carried out through the analysis of elementary lesions according to color modification, solid constitution, liquid content, thickness modification, skin continuity solution or tissue losses (those that tend to spontaneous elimination) and sequelae (scarring lesions). BAETA (2021). As specified in figure 1, guiding the prioritization of the patient within the care network.

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## Figure 1: Risk classification in Dermatology

1	Teledermatology
Ris	k classification and Referral
it serves as the b	tion is adopted in the examination reports requested by teledermatology and asis for the conduct to be adopted in the cases attended, as set forth in the left the color of the classification and the right the conduct to be adopted.
White No pathological	Skin changes without intervention They should be guided and monitored in the unit. Basic health
Blue Cases light	Management in the Basic Health Unit Management guidelines are present in the examination report
Green Cases moderates	Request teleconsultation to the telehealth Center Acre Possibility of follow-up at UBS with I specialist support or referral to the service Dermatology in Rio Branco
Yellow Cases graves	Refer to the dermatology service Use the regulation system (SISREG) of the municipality to mark specialist in Rio Branco
Red Cases urgent	Refer immediately to the emergency department Make contact with SAMU for transportation
Telehealth	Telehealth The Santa Catarina

The reports issued, accompanied by diagnosis and clinical conduct, allow PHC physicians to solve many cases without unnecessary travel or specialized consultation.

The objective of the present study is to report the experience of the teledermatology care project carried out at the Barral Y Barral Polyclinic in the city of Rio Branco - AC, with the purpose of speeding up the care of the most severe cases, reducing the queue in specialized care, expanding access and saving public resources.



#### **EXPERIENCE REPORT**

From August 31 to September 1, 2023, the teams of Telessaúde Acre and the Municipal Health Department - SEMSA Rio Branco carried out a "joint effort", lasting 2 days, to intensify Teledermatology actions with the objective of reducing the queue of referrals from the Regulation System (SISREG) and increasing the resolution related to cases already referred. With the support of the national Teledermatology offer of the Telehealth Center of the Federal University of Santa Catarina (UFSC).

"Teledermatology is an important tool that has provided diagnosis via the internet, through the STT portal, which enables and facilitates the approximation of Primary Care to specialized care. The innovative technology used by STT is developed by the Federal University of Santa Catarina, through INCoD (National Institute for Digital Convergence). The great differential of this form of Teledermatology is in the use of clinical protocols for photographic registration of lesions that allow the physician to describe the lesion, classify the risk and, when necessary, suggest the clinical conduct in Primary Care." (Telehealth UFSC, Telemedidina Santa Catarina, 2024, online).

It took place at the Barral Y Barral Polyclinic, located in the urban area of the Municipality of Rio Branco-AC, the unit acts as a Health Center/Basic Unit, and comprises several specialties, including teleconsulting.

The experience is about Teledermatology care with the use of information technologies capable of offering specialized care through medicine in primary care

During the action, a team of four teleconsultants from the Telehealth Acre, Family and Community Medicine (FCM) residents and interns of the internship of the Medicine Course at the Federal University of Acre - UFAC joined the SEMSA Rio Branco team to carry out the exams at the Barral y Barral Polyclinic, with the forecast of offering 200 teledermatology exams to patients who are in line waiting for care with a dermatologist. The exam was reported by dermatologists from the



Telehealth Center of Santa Catarina within a maximum period of 72 hours.

The action was carried out with Primary Care patients who were identified with a skin lesion that made the doctor suspect something to refer him to the specialist. The patients referred were reassessed by this task force, in order to identify those who could be treated in Primary Care and stratify the risk, thus being able to prioritize the care of patients referred to the Specialized Outpatient Clinic of the Acre State Hospital Foundation (FUNDHACRE). This action took place for 2 days, through risk classification and after these consultations, the results of the tests received were analyzed.

It was extremely important to participate in this service, offering quality care, with agility to patients already referred by the basic care, but who, due to the extensive, costly and limited demand, would wait a long period for this care to reach the specialized professional, causing severity to the prognosis of the lesions.

### METHODOLOGY

This is a literature review study in the form of an experience report, with a deductive method, descriptive objective, basic nature and a qualitative-quantitative approach.

Data were obtained from the databases of the regulation system of the Municipal Health Department of the Municipality of Rio Branco, to obtain the waiting list for dermatological care and from the patients themselves at the time of care to assess the need for care.

The patients were called from the waiting list for dermatology consultations in the municipality of Rio Branco-AC, composed of approximately 771 patients at that moment , the first 200 were called for care. The service had a platform with internet access, which enabled agility in the service, in this way the evaluations through image that are carried out at the Telediagnosis Point existing in the municipality or by the doctor himself with the use of the cell phone and ruler next to the lesion, to estimate the size.

The photos were taken with rulers, so that we could characterize each injury. The description



began with the patient's initial letters, age, mention of the existence or not of comorbidity and the duration of the disease. Next, a summary was made of the evolution of the lesions, the medications in use, the evolution and the current situation, as shown in the example of Figure 2. The same example was used to refer the patient's case via the internet to the specialized care at the STT of Teledermatology.

### Figure 2: Example of a case summary to send for Teledermatology care



# Source: prepared by the task force team

Then, the photo was sent to a dermatology specialist at the Santa Catarina Center through the Telehealth platform for the issuance of the report. In the report, the specialist already makes the risk classification.

### FINDINGS

The data were provided by the Teledermatology Task Force at the Barral y Barral Polyclinic in August/September 2023. The task force aimed to serve 200 patients with referrals to a dermatology



specialist in Rio Branco - Acre. Of these, 142 exams were performed, and a total of 128 of them were considered valid by the specialist via Teledermatology. Of the 128 valid lesions classified through Teledermatology, only 77 of them were diagnosed and received care according to their diagnosis, and 50 were guided and treated in PHC, they did not need to go to the Dermatology service.

In the experience, there was no emergency classification - red, with only: yellow - tertiary referral with 9 consultations 7%, green classification - secondary network 69 patients 53.9%, being the most prevalent classification, followed by blue - UBS protocol with 35 patients 27.3% and white - UBS orientation with 15 diagnoses, 11.7% who could have received only guidance in primary care. And the 9 tertiary referral visits included three non-melanoma cancer diagnoses. As shown in Table 1 below:

Colour	Ν	%	
	White	15	11,7
	Blue	35	27,3
	Green	69	53,9
	Yellow	9	7
	Red	0	0
Total	128	100	

Table 1: Risk classification

Source: Prepared by the task force team

Of the 77 diagnostic hypotheses, the following were included: 14 Nevi, keratosis and warts 18.2%; 11 Sun dermatoses 14.2%; 10 Eczema 13%; 10 Diseases caused by fungi 13%; 9 Acne 11.7%; 6 Autoimmune diseases 7.8%; 5 Diseases of the annexes 6.5%; 3 Diseases caused by bacteria and mites 3.9%; 3 Skin cancer 3.9% and 3 dermatitis linked to atopy 3.9%. Table 2 shows:



Disease groups		%
Nevi, keratosis and warts		18,2
Sun dermatoses		14,2
Eczema		13
Diseases caused by fungi		13
Acne	9	11,7
Autoimmune diseases		7,8
Diseases of the annexes		6,5
Diseases caused by bacteria and mites		3,9
Skin cancer		3,9
Dermatitis linked to atopy		3,9
Other benign diseases		3,9
Total		100

Table 2: Disease groups

Source: prepared by the task force team

Within the disease groups, the patients received the following diagnoses: 9 Diagnosis of Acne 11.7%, 8 Melanocytic Nevus 10.3%, 6 Contact Dermatitis 7.8%, 6 Chronic Photodamage 7.8%, 5 Pityriasis versicolor 6.5%, 4 Seborrheic Keratosis 5.2%, Vitiligo 5.2%, 4 Alopecia 5.2%, 3 Non-melanoma cancer 3.9%, 3 Eczema 3.9%, 3 Melasma 3.9%, 2 Atopic dermatitis 2.6%, Folliculitis 2.6%, 2 Leucoderma 2.6%, 2 Tinea corporis 2.6%, 2 Tinea pedis 2.6%, 2 Viral wart 2.6%, the others as shown in table 3 below:



Diagnostics	N	%
Acne	9	11,7
Melanocytic nevus	8	10,3
Contact dermatitis	6	7,8
Chronic photodamage	6	7,8
Pityriasis versicolor	5	6,5
Seborrheic keratosis	4	5,2
Vitiligo	4	5,2
Alopecia	4	5,2
Non-melanoma cancer	3	3,9
Eczema	3	3,9
Melasma	3	3,9
Atopic dermatitis	2	2,6
Folliculitis	2	2,6
Leucoderma	2	2,6
Tinea corporis	2	2,6
Tinea pedis	2 2	2,6
Viral warts	2	2,6
Pilaris cyst	1	1,3
Dyshidrosis	1	1,3
Scabies	1	1,3
Stretch marks	1	1,3
Fibroma	1	1,3
Chronic simple ligem	1	1,3
Onychomycosis	1	1,3
Pityriasis alba	1	1,3
Psoriasis	1	1,3
Syringomas	1	1,3
Total	77	100

Table 3: Diagnoses of the consultations.

Source: prepared by the task force team

### DISCUSSION

The proposal was to serve patients referred to dermatology and refer them to Teledermatology,



to speed up care and optimize waiting time and treatment. According to Cristiana Silva; Murilo Souza (2009), in telemedicine, in the teleconsultation modality, there are two main forms of data exchange: "store-and-forward" when the transmitted information is stored until it is accessed and "real-time" when there is real-time interaction between the parties involved. In this experience, the information (photos) was sent, along with the detailed anamnesis of the patient, to reduce costs and time, due to the time zone and availability of professionals.

As already mentioned, the participants were residents of Family and Community Medicine and medical interns of the Federal University of Acre - UFAC, under the supervision of UFAC preceptors, who received the patients and made the first care and referred them to Teledermatology for evaluation. The photographs taken of the lesions on the skin of each patient were sent to the doctor responsible for the action, who inserted them into the system. This practice was able to explore to the fullest the learning from the practice of case monitoring.

In this study, the degree of total agreement between face-to-face and distance diagnosis was not achieved, since the task force included only the care of patients referred by the UBS and the sending of data for analysis through teledermatology.

Regarding the security and operation of the system used for the transmission and storage of data, no type of failure was observed. Nor was any type of difficulty in handling the interface used, and its use was assimilated with great ease by all participants.

#### FINAL CONSIDERATIONS

Acre has few dermatologists who provide care through the SUS. And in addition to serving the entire territory of Acre, they serve some municipalities in Amazonas and Rondônia. And taking into account the great demand, the Teledermatology task force was important to speed up care, reducing the waiting time for patients to screen for referrals. The task force was able to redistribute the cases to their appropriate sectors with the specialist's vision.

ISSN: 2763-5724 / Vol. 05 - n 01 - ano 2025



In this way, this experience was potentially positive. All these consultations were carried out for 2 days, causing this specialty to receive deserved attention, taking into account the delay in the care of this specialty due to the demand and misdirected screening.

Therefore, the fact of medical deficiency in the dermatology specialty, which comes from academic training, contributes to the increase in referrals that in most cases could be diagnosed and treated in the basic unit, in some cases only with guidance on the use of sun protection.

Therefore, it is essential to involve Primary Health Care professionals in Teledermatology care, in order to outline possible paths of care based on the specific needs of the communities, thus, it is crucial to implement measures that improve the problem-solving capacity of PHC, support their training in general dermatology and assist in the management of referrals to specialized services. Teledermatology is one of the solutions for improvement.

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