





Scientific article

## Telehealth in Peru according to the National Plans for 2005 and 2020

 Sergio Martin Taipe Ledesma <sup>a</sup>

<sup>a</sup> Universidad Tecnológica del Perú, Perú 

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### ABSTRACT

Telehealth has great potential to provide remote medical assistance in a synchronous or asynchronous manner to those who require it. The objective of this study is to carry out a comparative analysis between the Peruvian Telehealth Plans of 2005 and 2020. This article is a documentary review. The contents of these two regulatory documents pertaining to the Peruvian health sector were meticulously traced. The results indicate that telehealth has emerged as a necessary and essential alternative for the improvement of health care in areas with difficult access geography. Although the 2005 resolution had a necessary starting point, its scope was restricted. In contrast, the 2020 resolution achieved significant progress in the incorporation of telehealth, although it also highlighted the need to continue investing in infrastructure and training of health sector employees to ensure equitable and adequate care. Although progress has been made in telehealth, there are still important challenges that require attention in order to consolidate a more effective and viable system.

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## La telesalud en el Perú según los Planes Nacionales de los años 2005 y 2020

### RESUMEN

*Palabras clave:*


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La telesalud posee un gran potencial para brindar asistencia médica a distancia de manera sincrónica o asincrónica a las personas que lo requieren. El objetivo de este estudio es realizar un análisis comparativo entre los Planes de Telesalud del Perú de los años 2005 y 2020. Este artículo es de revisión documental. Se hizo un rastreo meticuloso del contenido de estos dos documentos normativos pertenecientes al sector salud del Perú. Los resultados indican que la telesalud ha surgido como una alternativa necesaria y esencial para la mejora de la atención sanitaria en zonas con geografía de difícil acceso. Si bien, la resolución de 2005 tuvo un punto inicial necesario, su alcance fue restringido. En contraste, la de 2020 logró significativos avances en la incorporación de la telesalud; aunque también, puso en evidencia la necesidad de seguir invirtiendo en infraestructura y capacitación de los empleados del sector salud, para de esta manera garantizar una atención equitativa y adecuada. Aunque se ha progresado en telesalud, aún persisten desafíos importantes que requieren atención para consolidar un sistema más efectivo y viable.

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## INTRODUCTION

Telehealth worldwide, due to the incorporation of Information and Communication Technologies (ICT). (Alva-Arroyo et al., 2021; Carregal Rañó et al., 2020; Villalobos, 2020) has become an increasingly common experience and a fundamental solution for optimizing access to remote healthcare. (Huapaya-Huertas et al., 2022; Litewka, 2005; Mesa & Pérez, 2020) mainly in countries with complex geographies. This modality of care is essential for providing medical services to patients (Camacho, 2023) which are often located in remote areas, and which are often (Flores-Lovon & Ticona, 2021); however, its success lies in the ethical implementation, ensuring quality, safety and continuity of the health service. (Quispe-Juli, 2021).

This form of care can be carried out in two ways: synchronously, through video calls or radio communication, and asynchronously, through online messages or web platforms that allow the evaluation of studies and clinical-demographic data. (Mesa & Pérez, 2020). However, its more widespread adoption requires a significant transformation in management and a restructuring of current health care models. (Curioso & Galán-Rodas, 2020).

A study conducted in Spain indicates that its health system during the period 2020 - 2021 presented considerable technological progress, implementing various services through telehealth, focused on improving the system and efficient patient care; however, improvements in infrastructure, digital training to staff, as well as the generalization in the different health care services, are still needed. (Cernadas et al., 2020). Likewise, in the United States, research shows that its healthcare system will need to incorporate telehealth more intensively in 2020 in order to care for patients with mental illnesses and other pathologies. (Monraz-Pérez et al., 2021), another study carried out in that country mentions that the use of telehealth also benefited elderly and low-income people during the pandemic season. (Mendoza-Alonzo & Mendoza-Alonzo, 2021). Along the same lines, a study conducted in Bolivia showed that telehealth had its beginnings in 2013 in that country, and that its implementation was expanded with the arrival of the COVID-19 (Ruiz-Yngol & Flores Sotelo, 2022), providing medical care through teleconsultations. In Buenos Aires, a survey carried out in 2022 and published in 2024, reported that the incorporation of ICTs made it possible to include telehealth processes for user care; however, the study concludes that it is still necessary to establish regulations that will allow the continuity of this service. (Ganiele et al., 2024).

Peru is not exempt from the use of telehealth. In 2005, the National Telehealth Plan was launched, which represented the first multisectoral initiative aimed at addressing the gaps in accessibility to health services, especially in remote and rural regions. (Curioso & Galán-Rodas, 2020). After that, there were other regulatory documents such as Ministerial and Head Resolutions and Legislative Decrees that addressed telehealth in Peru. In 2020, the National Telehealth Plan in Peru was approved through R.M. No. 1010-2020-MINSA, immediately starting the teleconsultation and telemonitoring services due to the arrival of the SARS-CoV-2 pandemic. (Mejía, 2022). These National Telemedicine Plans of 2005 and 2020 were two significant milestones in the regulation and progress of telehealth in Peru. A study carried out in 2020 concludes that as a result of COVID-19, telehealth was developed in an accelerated manner in Peru, seeking to attend to

the mental health of patients suffering from some type of disorder in their nervous system. (Alva-Arroyo et al., 2021). Another study conducted in this country revealed that during the pandemic period, telehealth was prioritized for those with COVID-19, as they were considered higher risk patients. (Ramírez et al., 2020). Another important research finding was the insufficient reach of the Internet in certain areas of Peru, which complicated the provision of telehealth services, especially for patients suffering from gastrointestinal problems. (Huapaya-Huertas et al., 2022).

This study will make a comparative analysis of Peru's Telehealth Plans of 2005 and 2020, highlighting their strengths and actions for improvement, as well as the achievements and challenges they have faced, in order to provide a comprehensive view of their impact on the health system.

### 2005 National Telehealth Plan

The 2005 National Telehealth Plan laid the foundations for telehealth in Peru, focusing on the incorporation of Information and Communication Technologies (ICT) as useful tools to provide medical services; its most significant achievements were the promotion of the inclusion of technology in rural areas and raising people's awareness of the great importance of telehealth. (Congreso de la República del Perú, 2005).

With respect to telehealth, this plan proposed the use of information and communication technologies to promote the development goals established in the Millennium Declaration. These goals establish the reduction of infant mortality, improvements in the health of mothers, the fight against HIV/AIDS, among other conditions, as well as guaranteeing the conservation of the environment and encouraging strategic global alliances to achieve sustainable development in order to build a more peaceful, just and prosperous country. (Congreso de la República del Perú, 2005).

Although the potential of telehealth was identified, its implementation was uneven and limited to pilot projects, with shortcomings in its defined operational framework. This absence, in its implementation, limited its impact on the expansion of health coverage. However, another of the main problems was its initial nature and the lack of a precise procedure for providing continuous training to personnel and improving infrastructure; likewise, the lack of clarity in the financial aspect and the inadequate coordination between the different regions prevented this initiative from achieving its objective.

### 2020 National Telehealth Plan

The 2020 National Plan contained in Ministerial Resolution No. 1010-2020-MINSA, made remarkable progress in filling the gaps left by its predecessor. This regulation increased telehealth services and incorporated precise guidelines for teleconsultation, telediagnosis and telemonitoring; one of its most outstanding achievements was the establishment of a much more flexible framework, which allowed health professionals to provide remote care in an agile and efficient manner. (MINSA, 2020).

The technological advances and cooperation considered in the 2020 National Telehealth Plan include the motivation to encourage the use of integrated technological platforms in order to guarantee the

interoperability of health information systems. This collaborative approach strengthened communication between the different levels of the health system and made it possible to provide medical services to patients in remote areas. (Curioso & Galán-Rodas, 2020). In addition, initiatives were taken to train and raise awareness among healthcare personnel, which increased levels of confidence in the use of these tools.

Despite its achievements, this Plan had significant challenges, one of them being the unequal digital infrastructure in the country, which limited access to telehealth in rural areas. Likewise, inadequate connectivity and the digital divide persisted as critical difficulties that limited the equitable expansion of such services. Although the 2020 framework is more consistent and thorough, its rapid implementation in the state of health emergency showed its shortcomings in regulating data and safeguarding patient privacy.

**Table 1**

*Comparative table of the 2005 National Telehealth Plan and the National Telehealth Plan 2020*

Aspect	National Telehealth Plan 2005	National Telehealth Plan 2020
Objective	Establish the implementation and dissemination of the bases for telehealth in Peru.	Define guidelines, strategic actions and technical orientations for the implementation of telehealth services in the different geographical settings.
Approach	Incorporate ICTs in rural areas.	Implementation of teleconsultation, tediagnosis and telemonitoring.
Strengths	Promote the inclusion of ICTs in rural areas.	Incorporate a flexible framework to provide agile and efficient remote assistance.
Challenges	Presence of barriers in infrastructure and training for users and health personnel.	Presence of inequality in digital infrastructure, inadequate connectivity and digital divides in rural areas; as well as the protection of patient privacy.
Implementation	Integrate pilot projects with limited impact.	Rapidly integrate telehealth.
Coverage	Only targeted to specific areas through pilot projects.	Increase in the scope of medical care, especially in remote areas due to teleconsultation.
Regulation	Lack of clarity in the operational framework.	More precise regulations, but with shortcomings in data regulation and in safeguarding patient privacy.
Expected results	Implement and optimize access to health services.	Increase the efficiency, effectiveness and scope of health care.
Monitoring and evaluation	Unclear incorporation of an evaluation, monitoring and supervision plan (PEMS).	Continuous monitoring of data collection, continuous training of health personnel and evaluation of results.
Authors	Telehealth Consultative Council (MINSa, MTC, INCITEL, Essalud, OSPITEL)	MINSa

Source: Adapted from National Telehealth Plan 2005 and National Telehealth Plan2020. (Congreso de la República del Perú, 2005; MINSa, 2020)

When comparing these two plans, it is clear that the 2020 National Telehealth Plan is much more significant and advanced in terms of coverage, technology and regulation. While the 2005 regulation was restricted to being a first experimental step, the 2020 regulation was implemented as a model for effective action in emergency situations, revealing both rapid achievements and shortcomings in its structure.

A common element is that both regulations emphasize the importance of telehealth; however, only the more recent one reflects a development that aggregates lessons learned from previous

## MATERIAL AND METHODS

The present research followed a qualitative approach and is classified as a basic study. The technique used was documentary research. (Sánchez, 2020), The information contained in two important policy documents, the 2005 Peruvian National Telehealth Plan and the 2020 Peruvian National Telehealth Plan, was carefully traced and a comparison of the two National Telehealth Plans and the corresponding analysis was made.

## RESULTS

The results of the detailed analysis of the 2005 Peruvian National Telehealth Plan and the 2020 Peruvian National Telehealth Plan, in their 9 important aspects: objective, approach, strengths, challenges, implementation, coverage, regulation, expected results, and monitoring and evaluation, are detailed in Table 1.

experiences and the immediate needs brought about by the pandemic. (Javier Silva & Rosario Pacahuala, 2021).

## CONCLUSIONS

Peru's 2005 and 2020 National Telehealth Plans are key points in terms of telehealth regulations and progress in Peru. Both plans clearly show the growing importance of telehealth, which is considered a necessary solution to facilitate access to healthcare, highlighting the urgency of

structuring a robust regulatory framework to ensure its continuous improvement.

Peru's 2005 National Telehealth Plan marked the beginning of telehealth in the country by promoting the use of ICTs in rural areas, where health infrastructure is generally deficient. However, its implementation faced limitations in terms of infrastructure, inclusion of technologies and training, both for patients and health personnel. In addition, the limited impact of the pilot projects had restrictions, preventing them from achieving the expected results. This situation is compounded by the lack of clarity of the operational framework, which hindered their effectiveness and prevented them from achieving the expected standards.

Peru's National Telehealth Plan 2020 had significant improvements over the previous Plan, including teleconsultation, telediagnosis and telemonitoring; however, it faced challenges such as poor digital infrastructure, inadequate connectivity, especially in rural areas, as well as the protection of patient privacy. This Plan also incorporated a more structured approach to monitoring in order to ensure the quality and continuity of medical services.

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