

REVIEW. DISCUSSION

What the Pandemic Left Us: Regulatory Advances for Telemedicine and Telehealth in Argentina

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Abstract

This report describes the regulatory frameworks adopted during and since the COVID-19 pandemic from 2020 onward in Argentina, as well as the impact of these disciplines and how they relate to the expansion of telemedicine and telehealth in the region's health sector. Among its many side effects, the COVID-19 pandemic left several positive outcomes. This article talks about one of the main positive effects in the post-pandemic period: the adoption of telemedicine and telehealth – two related disciplines already present in several Latin American countries but which, in the past 2 years, came to be a solution for delivering medical care to patients. Factors such as social-distancing measures, the lack of knowledge about the virus at the beginning of the pandemic that led to strict protective measures being taken in hospitals and doctors' offices, restricting face-to-face care of patients to a bare minimum, and the rapid response of governments, healthcare institutions, payers, and professionals, provided the conditions that telemedicine and telehealth had needed for many years to flourish and occupy the predominant place they currently have in the global health ecosystem. All the benefits of remote patient care became apparent at a time in world history that marked a turning point in advancing information and communication technologies for health. The report looks at the regulatory frameworks adopted during or since Argentina's COVID-19 pandemic from 2020 onward.

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he first case of COVID-19 in Argentina was detected in Buenos Aires on March 3, 2020; by March 11, the virus was considered a pandemic. The National Ministry of Health established the definition of "suspected case" based on the recommendations of the World Health Organization (WHO) and the country's epidemiological situation. The goal was to detect new cases early on to facilitate appropriate patient care and implement research, prevention, and control measures to reduce the risk of infection among the population. On March 19, Social, Preventive and Mandatory Isolation (ASPO, Spanish acronym) was decreed.

Among its many side effects, the COVID-19 pandemic left some positive results. One of the biggest positives was the adoption of telemedicine and telehealth, two related disciplines already present in several Latin American countries but which, in the past 2 years, proved to be a solution for delivering medical care to patients.

Factors such as social-distancing measures and the lack of knowledge about the virus at the beginning of the pandemic led to strict protective measures in hospitals and doctors' offices, which restricted face-to-face care of patients to a minimum. In response, governments, health-care institutions, payers, and professionals provided the conditions that telemedicine and telehealth needed to flourish and occupy their current predominant place in the global health ecosystem.

Health and social care institutions throughout the region employed various telemedicine techniques during the COVID-19 pandemic, incorporating apps that enabled professional consultants to digitally submit medical prescriptions to pharmacies, giving patients quick access to their medicines without them being electronic prescriptions according to this tool's own definition. With the implementation of chatbots (software applications that mimic written or spoken human speech), COVID

symptoms could be documented before face-to-face diagnostic testing without requiring patients suspected of infection to move. Now that the pandemic is over, we see that broadly speaking, the results have been positive, both for the population and for healthcare establishments – achieving diversification of the care model based on the challenges posed by the various organizations.

The first positive effect is that all the benefits of remote patient care became apparent at a time in world history that marked a turning point in advancing information and communication technologies (ICTs) for health.²

The current scenario is encouraging, given that telemedicine and telehealth, which have existed in Argentina since 2012, are being used more confidently by both health-care professionals and patients. At the same time, there is greater momentum and regulation by health authorities.

In this report, we look at the factors that enabled this growth and the regulatory frameworks that were adopted as a side effect of the COVID-19 pandemic since 2020 in Argentina.

Experiences in the Use of Telemedicine and Telehealth in Argentina

According to the Ministry of Health of Argentina, "Telehealth is the delivery of health services using ICTs, specifically when distance is an obstacle for health services. The field of telehealth is defined in four dimensions: teleconsulting, teleeducation, teleresearch, and telemanagement." The entity that regulates the Argentine healthcare system highlights the advantages of telehealth as reducing the overload on the healthcare system, facilitating equity in access to healthcare services regardless of geographical location, providing care and continuity of follow-up for at-risk groups, providing specialized healthcare in places where it is not available, agile communication between professionals, communication centred on the care of the individual and a reduction in social and healthcare costs.

Telemedicine, as defined by the Ministry of Health, is one of the components of telehealth and uses "teleconsultation" and "teleassistance" as synonyms for telemedicine. It is described as "a modality of healthcare that is developed through the use of technological channels, allowing the resolution of health problems remotely, in its two variants, first and second opinion. The first opinion implies the professional's attention to the person directly, within the limits of their provincial jurisdiction, through ICTs and in a synchronous manner, that is, at the moment; and the second opinion is that which is carried out between professionals, both in the same jurisdiction and outside it in a deferred manner (asynchronous) or at the moment (synchronous)."

In the context of the pandemic, the Argentine public health system implemented first-opinion consultations, enabling remote assistance and follow-up of patients at home, either for suspected or confirmed cases of COVID-19 or for at-risk groups. This implementation, through chatbots and telephone lines dedicated to the pre-diagnosis and follow-up of patients with COVID-19, including, in some cases, the possibility of detecting symptoms through audios⁴ (e.g., people sent a recording of the sound of their cough to the chatbot of the government of the City of Buenos Aires, known as "Boti" and others established a milestone in teleassistance from public health.

At a national level, it is important to mention that the telehealth and remote communication platform⁶ is a management tool that allows the ongoing assessment and monitoring of the use of the modality. The platform is software available on the web, property of the National Ministry of Health, developed under national and international standards for using digital health information that interoperates with the systems of each jurisdiction and institution through an interface. The infrastructure is running on OCP (Openshift Container Platform – RedHat).

The current software complies with HL7® FHIR® (Health Level Seven, Fast Healthcare Interoperability Resources) standards. Another of the features provided on the telehealth platform is providing advice and assistance to the 24 jurisdictions regarding telehealth strategies, legal issues, and the implementation of the Telehealth and Remote Communication Platform so that the provincial referents are able to replicate the use of the system with the health teams in their respective jurisdictions.

Regarding infrastructure and monitoring of videoconferences, the national telehealth area manages, advises, administers, and monitors the infrastructure of the Federal Telehealth and Remote Communication Network and the videoconferencing network, as well as everything related to the implementation of new ICTs. In 2020, there was exponential growth in the use of the modality and the number of nodes (health facilities) participating in the Federal Telehealth and Remote Communication Network.

As part of the strategy to strengthen and expand the Federal Telehealth Network, equipment kits were delivered to different jurisdictions in order to set up new nodes. According to data from direct sources from the Argentine Ministry of Health for this article, 49% of the total 1,943 telehealth nodes correspond to the First Level of Care (an increase of more than 100% compared to 2020). Likewise, the number of users of the Telehealth and Remote Communication Platform increased by 200% in 2020, with more than 12,000 users enabled to make teleconsultations to date. As of March, more than 196,430 teleconsultations have been carried out. The number of people assisted under the telehealth modality is even higher, reaching more than 1,900,000 consultations throughout

the country, considering that the registry is not exact (and the fact that many more consultations could have taken place but not been registered) since some jurisdictions have records of teleconsultations in other provincial systems and their platforms. Telehealth nodes in Argentina and the number of health nodes in each jurisdiction are presented in Figure 1.

Factors that Accelerated Adoption of Telemedicine

This leap forward in the application of teleconsultations as a tool of telemedicine in Argentina may, in the first place, be related to the country's high levels of connectivity. According to market data consultancy Statista, 83% of the population uses the internet in Argentina, with a total of 36.1 million internet users recorded in 2021. The capital city of Buenos Aires and Buenos Aires Province are the areas with the highest number of internet log-ons recorded in 2021. By 2022, the company estimated that roughly 37.2 million people in Argentina had access to the internet, representing a considerable increase over the number of recorded users in 2020. It is calculated that, by 2025, around 40.1 million Argentines will have access to the network. According to a recent survey, more than 90% of households in Argentina had internet access.8

The first broadband connections began in Argentina at the end of the nineties, putting it among the countries with the highest internet penetration rate in Latin America, with more than three-quarters of its population having access to the Web. In 2021, approximately 90% of the

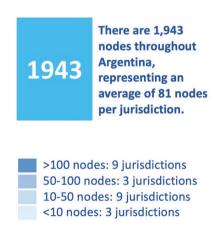
country's households had internet access. In September 2021 alone, over 42 million internet log-ons from fixed and mobile devices in Argentina were recorded.8

With regard to regulation that acknowledges the prior existence of telemedicine and telehealth, promoting it as a tool to address the healthcare challenges caused by the pandemic, it is worth looking at the various resolutions adopted by the Argentine government.

In 2018, the then Secretariat of Health Governance issued Resolution 189/18, approving the 2018-2024 National Digital Health Strategy to reduce the gaps in healthcare quality by implementing information systems capable of identifying the needs of the population, enabling longitudinal, comprehensive patient follow-up, and providing healthcare professionals with innovative tools. One of the goals this strategy established was to introduce a National Telehealth Plan aimed at developing the regulatory, economic, health, and technical aspects of telehealth in Argentina, which included the aim to implement telehealth networks to provide patients with remote care and second-opinion consultations, improve accessibility, prevent delays, and compensate for regional differences in specialties and resources.9

Three months later, in early 2019, the Federal Secretariat of Health Governance issued Resolution 21/2019, creating the 2018-2024 National Telehealth Plan under the framework of the Universal Health Coverage strategy and as part of the Digital Health Strategy. The National Telehealth Plan is made up of three parts: Governance







Jurisdiction	Telehealth Nodes	Active Nodes	PNA Telehealth Nodes	PNA Active Nodes
BUENOS AIRES	115	0	0	0
CABA	0	0	0	0
CATAMARCA	42	22	35	15
CHACO	20	6	4	1
CHUBUT	101			
CÓRDOBA	15	13	12	12
CORRIENTES	17	9	1	0
ENTRE RÍOS	181	102	121	60
FORMOSA	12	12	7	7
YUIUY	350	85	311	50
LA PAMPA	110	110	106	106
LA RIOJA	54	22	12	12
MENDOZA	286	176	270	152
MISIONES	8	6	2	0
NEUQUÉN	116	116	86	86
RÍO NEGRO	29	18	16	10
SALTA	47	47	35	35
SAN JUAN	158	15	151	10
SAN LUIS	26	15	18	12
SANTA CRUZ	8	6	2	1
SANTA FE	74	74	63	63
SANTIAGO DEL ESTERO	109	78	97	68
TIERRA DEL FUEGO	13	2	11	0
TUCUMÁN	52	52	46	46
TOTAL	1.943	1.087	1.498	793

Fig. 1 Telehealth nodes in Argentina and the number of health nodes in each jurisdiction. National Telehealth Survey, National Directorate of Health Information Systems, Argentine Ministry of Health, December 2022.7

and Steering, Management of the National Plan, and Program Development.¹⁰

Each of these parts has its respective action guidelines: federal scope for the entire country, the establishment of an advisory group on telehealth, standards, and legislation, for the Governance and Steering part; expansion and management of the telehealth network; definition of a financing mechanism, and systems of monitoring and assessment, for the National Plan Management part; and development of telehealth and tele-education programs for the Program Development part.

The resolution also created a Telehealth Advisory Group, formed by subject-matter experts charged with assessing, reviewing, and discussing the central issues to the telehealth agenda at national, regional, and international levels. The experts and representatives of various institutional fields (areas linked to health, communication, technologies, education legislation, etc.) met in February 2019. They produced a document setting out a series of recommendations for achieving a practice that is based on ethics, quality assurance, and safety and on promoting the strengthening of the relationship between the members of the health team and the patient team via real-time teleconsultation.¹¹

Lastly, the urgency of adapting the health system to rapid responses as demanded by the COVID-19 crisis resulted in the anticipated Telemedicine Act. To describe the legal basis and the context in which it emerged, it is worth looking at the study conducted by the Inter-American Development Bank (IDB):

Following the plenary meeting of senators on September 1, 2020, which discussed various bills on telemedicine and electronic medical records, the Argentine National Senate passed the Bill on Telemedicine as a provision of health services on October 15, 2020. Now, for its final approval and entry into force, it needs to be promulgated by the Executive Branch (Article 78 of the Constitution), wherefore we shall use the approved Bill for its analysis. Firstly, it should be noted that, given that the Provinces can regulate those normative aspects affecting health, and given the transference of constitutional competence, the final Act regulating Telemedicine as a provision of health services is the framework law, which the Provinces shall consider in order to develop their regulations.

The Bill is one further step in Argentina's legislation to achieve digital medical care and national connectivity in the arena of health, with the goal of improving people's access, strengthening health processes, and optimizing the resources available. In turn, it defines the conditions of implementation and the remote practices of health services that need to be implemented to achieve those goals.¹²

This legislation provided the framework needed to regulate the telehealth and telemedicine practices that were beginning to be developed, tested, or implemented in different parts of the country by state-of-the-art institutions like Hospital Italiano de Buenos Aires or Hospital Garrahan de Pediatría, as well as other scattered initiatives that were launched without having either regulation or backing from the state.

The dispersion and lack of planning or coordination of existing telemedicine and telehealth initiatives were factors that made it difficult to investigate the results of these practices. There was no centralized government body to measure their quality, impact, or efficiency throughout the country's vast territory or to provide oversight to ensure patient safety or proper professional training. Nor did it allow interoperability standards to be established for the various initiatives to exchange information, such as patient medical records, or to enable physician-to-physician consultation. All of this made it challenging to establish telemedicine and telehealth as an integral part of the country's health system.

The creation of these regulations, implemented by the Telehealth Coordination Office, promises to resolve these shortcomings and pave the way for better use of telemedicine and telehealth's potential in Argentina. This Federal Ministry of Health agency's mission is to develop and enforce policies related to the area to democratize access to the health system for the country's entire population and thereby help address the bottleneck in care.

One of the main achievements of this area is having information with which to assess the scope of telemedicine and telehealth in the country.

According to information the Federal Ministry of Health provided for an article published in the Argentine newspaper *Página 12*, by mid-2021, 1,122 nodes (health-care establishments) and 9,523 employees were conducting teleconsultations on its platform. The number of users grew considerably during the pandemic, given that in October 2020, that figure was 4,788.¹³

According to this article, 4,788 health workers conducted teleconsultations with their patients through the Argentine Ministry of Health's Telehealth platform in 2020, while the following year, the number of teleconsultations doubled. In 2021, according to the Ministry's survey, 1,404,504 were performed across the country.

The benefits of telemedicine, as well as the existing barriers to its full leverage in countries such as Argentina and neighboring Chile, have been set out by the bank (IDB) in its report entitled "Study on International Telemedicine in Latin America: Motivations, Uses, Outcomes, Strategies, and Policies" published recently (available in Spanish). The report is based on a comprehensive review of the literature, an online survey of 1,443 healthcare professionals

in 19 of the region's countries, and in-depth interviews with 29 telemedicine experts.14

Pioneer: Garrahan Pediatrics Hospital

The Garrahan Hospital (Hospital Garrahan de Pediatría) is a benchmark for remote communication in healthcare and networking with healthcare institutions nationwide. It has been developing telehealth activities and networks since 1997 when it created the Office of Remote Communication (OCD, Spanish acronym). The OCD promotes the local resolution of complex child health problems through telemedicine to avoid commutes and the uprooting of patients and their families, guaranteeing better access to the public health system. Since its inauguration, it has responded to more than 48,000 consultations.

The OCD began as an institutional response to the need to establish a permanent and effective link with professionals nationwide. In 2003, the OCD created the Distance Communication Program (PCD, Spanish acronym) of the Garrahan Hospital, which is currently made up of physicians, administrative staff, institutional psychologists, social workers, and graduates in Public Policy, Economics and Systems. The program, which aims to collaborate in the creation of communication networks between public health institutions, has more than 160 offices.

According to information provided by Dr. María Celeste Savignano, Telehealth Project Leader at the J.P. Garrahan Pediatrics Hospital, since 2006, the OCD, together with other sub-programs, has been part of the Reference and Counter-Reference Program (PRyCR, Spanish acronym), which operates in 22 provinces and has 161 offices. The program is developed in coordination with the policies of the National Ministry of Health and works with the respective provinces through established cooperation agreements. Because each province is autonomous from the national government, as Argentina is a federal country, cooperation agreements are conditions that favor the adoption of the changes proposed by the state in the health system. Garrahan's is the first telehealth system in the country, and today it connects 300 public health institutions in the 23 provinces of Argentina and the city of Buenos Aires. The first consultations in 1997 were carried out via fax, the technology available then; later, through equipment and software for videoconferencing, bedside connections, and platforms specially designed for video consultations. After the pandemic, a novelty implemented was the arrival at patients' homes through video consultations. This was done in coordination with the Ministry of Health through the Telecovid program, both for the follow-up of patients who tested positive and to provide continuity of care to patients with complex diseases without them having to move or stay in waiting rooms at the time of peak virus circulation. Based on this experience,

the Horizontal Integration Strategy was implemented to provide home care to chronic patients from different hospital services (avoiding their displacement).

A Unique Experience Implemented During the Pandemic: The Chatbot of the City of Buenos Aires

During the COVID-19 crisis, the City of Buenos Aires incorporated a triage to detect suspected cases in a chatbot on platforms such as WhatsApp, Facebook, Twitter, and Telegram. In addition to contributing to the early detection of issues, the strategy provided a communication channel for the population to obtain information validated by the Ministry of Health and direct contact with specialized health professionals.

Data Security and Other Discussions

Since February 28, 2023, when the application of Law 27. 553 on Electronic or Digital Prescriptions and Teleassistance (Decree No. 98/2023) and of the Law creating the Single Federal Program for the Computerization and Digitalization of Medical Records of the Argentine Republic, a new regulatory framework was created, as mentioned above, which, although it is an excellent step towards the digitalization of healthcare and, particularly, the expansion of the use of telehealth and telemedicine, there is still a complex and disorganized scenario in practice. In the Argentine health system, which is a federal system in which each provincial government defines whether or not it adheres to the national law, there is currently a coexistence of prescriptions and dispensing of medicines through electronic, digital, and traditional paper prescriptions, teleconsultations, and computerized medical records.

In this context, Guillermo Schor-Landman, a lawyer specializing in Telecommunications and Telemedicine Law, points out that questions arise from various provider and financing sectors.

One example of how the correct implementation of a telemedicine system can optimize the use of healthcare resources is the one Schor-Landman cites, Resolution 282/2020, signed by Eugenio Zanarini on April 1, 2020, as president of the Superintendence of Health Services, which is the first official Argentine document that promotes telehealthcare as a public obligation.15 "It was the first time that a step forward was officially taken, and the use of teleconsultation was made mandatory to avoid going to health issuing centers," said Schor-Landman. Although we didn't need an electronic medical records law or a telecare law as a legal framework because we had the legal instruments that allowed it, this resolution gives it a boost. With the pandemic, telemedicine suddenly matured. The prejudice of the medical world was overcome, as well as that of the patient, beyond remote or difficult-to-access areas.

How Telemedicine in Latam Contributes to **Optimizing Resources**

The report demonstrates a positive relationship between the use of international telemedicine and the productivity and efficiency of healthcare professionals. For example, 49% of survey respondents said cross-border telemedicine services are directly related to improving their professional skills, which has been corroborated through statistical analyses.

The use of international telemedicine is also associated with better returns for national health systems. For example, 43% of those surveyed associate it with fewer social inequalities in health, 42.6% with an improvement in the provision of national health services, and 40% with improvements in their countries' state of health. These figures have also been verified through statistical analyses.

Despite the benefits, the survey found that, on average, just 17.4% of healthcare professionals use international telemedicine systems. However, a slightly higher number (20.6%) intends to begin doing so. There are also minor differences between countries in the region.

At present, the number of patients who prefer online consultations is growing: computers, tablets, and cell phones are available to people who resort to ICTs to relieve an ailment and, in exchange, obtain a remote diagnosis without leaving the comfort of their homes.

Another initiative that contributed to this scenario in which the health authorities of countries in the region are considering the value of telemedicine and its potential for improving the health system is being worked on by the Pan American Health Organization. The organization stated that information technologies were a key factor in the health sector's response to the COVID-19 pandemic, especially during the imposition of the harshest confinement or social isolation measures in Argentina and other countries of the Americas region. Under that premise, and with the aim of "underpinning in the short term, with appropriate, modern regulations, these processes of technological advancement and digital transformation of the health sector, while also protecting people's rights," the VI Congress of Health Commissions of the Parliaments of the Americas, organized in Buenos Aires by PAHO and the National Congress, was held by virtual attendance in December 2020.16

This meeting convened to discuss digital transformation for the improvement of public health decisions, opportunities, and parliamentary challenges, resulted in the Argentina Declaration, agreed upon by the host parliaments of Bolivia (Plurinational State of), Brazil, Chile, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, and Uruguay.

The declaration urged the heads of state and government leaders of countries in the Americas to adopt specific measures to, among other goals, implement public policies and regulatory instruments for inclusive digital health with an emphasis on those most at risk.

In this regard, it should be noted that the region, and Argentina in particular as a Latin American country, has not integrated its telemedicine and telehealth systems, thus failing to take advantage of the potential of these disciplines to provide cross-border care. This is still a pending debt and a field with a long way to go.

According to a study of the telehealth and telemedicine market in Latin American hospitals carried out by Global Health Intelligence in 2020, which compares countries such as Argentina, Colombia, and Mexico, the three largest healthcare systems in the region, it is observed that only 2.1% of the hospitals in Argentina that perform telemedicine operate international teleconsultations, which is a low figure compared to 9.1% in Colombia and 7.8% in Mexico.

However, as a strength, 69.8% of the hospitals that perform TM in Argentina are telehealth hubs or nodes, versus 42% in Colombia and 61.5% in Mexico. In Argentina, there is also a higher proportion of private hospitals performing telemedicine than in other countries (45% vs. 38% in Colombia and 33% in Mexico).

As Guillaume Corpart, CEO of Global Health Intelligence, observes: "Telemedicine in Argentina is somewhat different from the same practice in Colombia or Mexico, with a greater focus on private hospitals, being mainly hubs and developing in-country networks with less interest in establishing international links."

Conclusions

We know that, although insufficient, a clear set of regulations on telemedicine and telehealth is needed from governments. The legislation Argentina implemented provides an institutional framework for deploying innovative services and methods in the country and aims to overcome geographical barriers in order to narrow the gaps in access to effective health coverage. A clear regulatory framework highlighting the value of telemedicine and telehealth for the whole country's health system will enable newer healthcare projects to be developed to respond to the population's needs and improve the efficiency of health systems and the opportunities that ICTs offer.

The rise of digitalization and telemedicine services that remained as a positive balance from the COVID-19 pandemic is an excellent opportunity for countries like Argentina and other countries in Latin America and the Caribbean to do more, not only by responding to the health needs of the populations but also by taking advantage of this experience as part of the knowledge economy and perhaps be able to think about exporting these kinds of cross-border services. In the last few years, the adoption of technology has broken down barriers, such

as the resistance of doctors and patients concerning telemedicine and the non-presential nature of medical care. Additionally, the effectiveness and ability to provide rapid responses to many health conditions have been proven, as well as the capacity to lower costs. There has also been increased knowledge, technological developments, and regulatory frameworks to make transactions transparent, provide greater patient security, protect data, establish electronic medical records, and adopt electronic prescriptions. Argentina is beginning to consider future scenarios of artificial intelligence and developing studies on the impact and effectiveness of telemedicine and telehealth systems.

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References

- La OMS caracteriza a COVID-19 como una pandemia OPS/ OMS | Organización Panamericana de la Salud [Internet]. www. paho.org.; 2020. Available from: https://www.paho.org/es/noticias/11-3-2020-oms-caracteriza-covid-19-como-pandemia [cited 01 March 2023].
- Reyes-Caorsi W. Efectos colaterales positivos de la pandemia [Internet]. www.researchgate.net. Revista Uruguaya de Cardiología; 2020. Available from: https://www.suc.org.uy/sites/ default/files/2020-07/rcv35n2_06.pdf [cited 20 February 2023].
- Preguntas frecuentes sobre Telesalud [Internet]. Argentina.gob. ar.; 2018. Available from: https://www.argentina.gob.ar/salud/ telesalud/preguntasfrecuentes#1 [cited 27 March 2023].
- 4. El chatbot del GCBA superó por primera vez el millón de conversaciones en un solo mes | Buenos Aires Ciudad Gobierno de la Ciudad Autónoma de Buenos Aires [Internet]. buenosaires. gob.ar. Available from: https://buenosaires.gob.ar/laciudad/noticias/el-chatbot-de-la-ciudad-supero-por-primera-vez-el-millon-de-conversaciones-en-un#:~:text=Desde%20la%20irrup-ci%C3%B3n%20del%20COVID19 [cited 27 March 2023].
- Vázquez MV, Levi D, Giussi MV, Baum A. Early detection of suspected cases of COVID-19 through automatic triage in a chatbot in the public health system of Buenos Aires City. Buenos Aires: Ministry of Health Office; 2021
- 6. República Argentina -Poder Ejecutivo Nacional TÉRMINOS DE REFERENCIA SERVICIO DE MEJORAS, SOPORTE, MANTENIMIENTO CORRECTIVO Y EVOLUTIVO DE LA PLATAFORMA DE TELESALUD Y COMUNICACIÓN A DISTANCIA (1.4.8. Hoja de ruta de salud digital) [Internet].

- Available from: https://www.msal.gob.ar/images/stories/Licitaciones-msal/TDR-%20Telesalud.pdf [cited 27 March 2023].
- Dirección Nacional de Sistemas de Información Sanitaria. Encuesta Nacional de Telesalud. Ministerio de Salud de la Nación Argentina: 9 de Julio 1925 - Piso 8 CABA. Available at: https://www.argentina.gob.ar/salud/digital; 2022.
- Número de usuarios de internet en Argentina de 2015 a 2026 [Internet]. Available from: https://es.statista.com/estadisticas/ 1218822/usuarios-de-internet-argentina/. 2023 [cited 27 March 2023]
- MINISTERIO DE SALUD Y DESARROLLO SOCIAL SECRETARÍA DE GOBIERNO DE SALUD [Internet]. Available from: https://www.argentina.gob.ar/sites/default/files/resolucion_plan_nacional_de_telesalud.pdf [cited 27 March 2023]
- BOLETIN OFICIAL REPUBLICA ARGENTINA MINISTERIO DE SALUD – Resolución 581/2022 [Internet]. www.boletinoficial.gob.ar. Available from: https://www.boletinoficial.gob.ar/detalleAviso/primera/259481/20220321 [cited 27 March 2023].
- 11. Encuentro E, El P, De L, Salud Y, El Paciente. ANEXO I 1º RECOMENDACIÓN PARA EL USO DE LA TELEMEDICINA GRUPO ASESOR-Resolución No 21/2019, Artículo 5º [Internet]. Available from: https://www.argentina.gob.ar/sites/default/files/anexo_1_recomendacion_uso_de_telemedicina_-_grupo_asesor_1.pdf [cited 27 March 2023].
- Estudio sobre telemedicina internacional en América Latina: motivaciones, usos, resultados, estrategias y políticas | Publications [Internet]. publications.iadb.org. Available from: https://publications.iadb.org/publications/spanish/viewer/ Estudio-sobre-telemedicina-internacional-en-America-Latinamotivaciones-usos-resultados-estrategias-y-politicas.pdf [cited 01 March 2023].
- Esteban P. La telemedicina: un fenómeno que llegó para quedarse | Ventajas y desventajas de una práctica que se impone [Internet]. PAGINA12. 2022. Available from: https://www. pagina12.com.ar/409467-la-telemedicina-un-fenomeno-que-llego-para-quedarse [cited 01 March 2023].
- 14. Saigí-Rubió F, Torrent-Sellens J, Robles N, Palaci JEP, Baena I. Estudio sobre telemedicina internacional en América Latina: motivaciones, usos, resultados, estrategias y políticas | Publications [Internet]. publications.iadb.org. Available from: https://publications.iadb.org/publications/spanish/viewer/ Estudio-sobre-telemedicina-internacional-en-America-Latina-motivaciones-usos-resultados-estrategias-y-politicas.pdf [cited 01 March 2023].
- BOLETIN OFICIAL REPUBLICA ARGENTINA SUPERINTENDENCIA DE SERVICIOS DE SALUD – Resolución 282/2020 [Internet]. www.boletinoficial.gob.ar. Available from: https://www.boletinoficial.gob.ar/detalleAviso/ primera/227378/20200402 [cited 27 March 2023].
- La salud universal y la pandemia Sistemas de salud resilientes Argentina [Internet]. Available from: https://iris.paho.org/bitstream/handle/10665.2/54660/OPSARG210001_spa.pdf?sequence=5&isAllowed=y [cited 27 March 2023].

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