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Inclusive and accessible implementation of telemedicine: Insights from the United Nations international expert roundtable

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Abstract

Invited panelists from different countries, who are actively involved in digital medicine, discussed the current state and future prospects of telemedicine at a roundtable during an international conference. The discussion covered various aspects of telemedicine, including the available technologies and the critical need for comprehensive databases, as well as insights on completed projects and their long-term viability. Our expertise in technology, sustainability, and telemedicine initiatives can be valuable, with the understanding that the ideas expressed can be applied to all fields and situations, while ensuring that equity and equality in their application are paramount to avoid exacerbating existing disparities. The overall aim is to leverage experience to support the successful implementation of new telemedicine endeavors across different healthcare sectors, with a focus on wide access to technology, affordability, digital literacy, and cultural and linguistic inclusivity.

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Introduction

Telemedicine (TM) has evolved from a complementary healthcare tool to a critical component of modern medical systems.[1] It is now widely adopted for remote consultations, chronic disease management, follow-up care, and collaborative diagnostics. Research has increasingly focused on real-time remote monitoring, wearable technologies and the integration of artificial intelligence (AI). Those enhance diagnostic accuracy, patient engagement, and accessibility to care, especially in rural or underserved areas.[2]

Despite these advancements, the sustainable and large-scale implementation of TM remains a challenge. There is still a lack of standardized guidelines and protocols across different healthcare systems, especially concerning interoperability, data security, and privacy regulations.[3] The effectiveness of TM in diverse social and cultural contexts also remains underexplored, and the cost-effectiveness of long-term TM implementations needs further evaluation.[4]

Among the Sustainable Development Goals (SDGs) of the United Nations' agenda to be achieved by 2030, the SDG 3 objective aims to guarantee health and promote well-being for everyone at all ages.[5] In this context, the authors were invited to share their knowledge as panelists of the roundtable on telemedicine (TM) organized during the 23rd Infopoverty World Conference of the Observatory on Digital Communication, founded by the architect Pierpaolo Saporito, in New York at the United Nations' headquarters on April 12, 2024.[6] The predefined talk and discussion program involved various aspects regarding the state of the art and perspectives on the future implementation of TM. The results of the roundtable are outlined below, including the experiences of the individual speakers, the subsequent exchanges of opinions after the conference, and what we have learned about the topic.

This paper aims to present and analyze the key topics discussed during the International Roundtable on Telemedicine held at the United Nations Headquarters in New York on April 12, 2024. The objective is to offer a comprehensive and multidisciplinary overview, highlighting lessons learned, transferable technological advances, and future directions for integrating TM into everyday clinical practice.

Methods

The discussion session was organized as a roundtable involving eight subject-matter experts from five countries (France, Israel, Italy, Spain, and the USA). Specifically, the group consisted of five clinical faculty members and three engineers. All participants were highly qualified experts. The clinicians had extensive experience in the development of digital medicine and specific expertise in translational medicine. They hold leading roles in TM, particularly due to the fundamental role of imaging technologies in diagnostic processes. The computer engineers brought diverse expertise, including database and software development, TM platform management, and leadership roles in human resources and business operations within globally active technology companies.

The topics addressed during the roundtable were selected based on their relevance and priority from both medical and technological perspectives, aiming to support the development of effective and sustainable TM projects. Many of the technological advances and proposals discussed are expected to have cross-disciplinary applications across multiple medical specialties.

The initial discussion took place during the live session, which was held in person in New York and via United Nations live streaming, enabling worldwide participation. Contributions from both in-person and remote participants enriched the debate. Following the session, the content was further refined through iterative email exchanges and the circulation of shared drafts. The two lead authors, C.A. and SD prepared the manuscript, circulated it among all roundtable participants, and incorporated their feedback over the months preceding this submission.

Semantics

“E-health” or “digital health” consists of the use of information and communication technologies to benefit human health, according to the World Health Organization (WHO).[7] A subset of e-health is represented by TM, the ensemble of healthcare services in which, thanks to the usage of innovative technologies, the health professional and the patient can be far away from each other. TM provides patients with direct (diagnostic/therapeutics) and indirect (increased knowledge) benefits in synchronous (in real time) or asynchronous (in deferred time) ways. The actors involved in TM are healthcare professionals of various types, such as doctors, nurses, technicians, tutors, and residents, who provide assistance to patients in various capacities.[8]

Technology

Nowadays, technology is a commodity. It is essential to organize not only the TM initiatives you want to support, but also the technological components to be adopted in a modular way for the project you aim to implement. Interconnectivity is the cornerstone of technology, with cloud storage and computing offering full scalability and infinite resources.

Today’s communication capabilities are extraordinary, including video conferencing software that can be embedded in platforms, real-time translation, and mobile health applications connected with wearable technologies that can be integrated, in addition to secure messaging platforms integrated mobile health applications, as well as mobile connectivity, Artificial Intelligence (AI), and the Internet of Things (IoT).

The development of 5 G/6G mobile connectivity will enable faster data transmission and lower latency, facilitating the widespread adoption of TM services. Mobile connectivity, particularly in developing countries, is advancing at a much faster pace than fixed infrastructure, providing a critical foundation for TM. This rapid expansion of mobile networks allows for low-cost data transfer even in remote locations, enabling effective remote control of IoT devices, faster remote diagnosis, and a seamless information exchange between patients and healthcare providers. As a result, populations in underserved or hard-to-reach areas can gain better access to healthcare services, leading to improved health outcomes and more equitable healthcare delivery.[9]

We must continue to exploit Artificial Intelligence (AI). The development of more sophisticated AI algorithms has the potential to revolutionize TM, particularly in areas such as image diagnosis. For example, AI models trained on large datasets of medical images—such as X-rays, Computed Tomography (CT) scans, and Magnetic Resonance Imaging (MRI)—can assist healthcare providers in detecting anomalies faster and with greater accuracy. These algorithms can identify early signs of diseases even before symptoms become apparent. In TM, this capability allows healthcare professionals to remotely diagnose patients in real time, ensuring timely interventions and reducing the need for in-person visits.[10]

By combining standard machine learning models with generative AI capabilities, we can enhance early diagnosis and predict disease progression with greater accuracy, but these models must be carefully designed to ensure fairness. Cross-referencing patient populations with similar co-morbidities and outcomes helps to identify patterns that are data-driven, but must be balanced with the understanding that every patient is unique. This approach ensures that AI supports equitable treatment planning without an over-reliance on historical trends that may not hold universally.[11]

The increasing use of AI and machine learning in TM platforms offers significant opportunities to enhance the role of healthcare providers. One key advantage is the ability to categorize patients based on cross-referencing population data with similar comorbidities and disease progression patterns. This enables healthcare professionals to identify trends, predict patient outcomes, and implement standardized treatment protocols more effectively. By leveraging AI-driven insights, treatment plans can be tailored to each patient's unique condition while benefiting from the efficiencies gained through treatment standardization across similar cases. This not only improves patient outcomes but also optimizes the usage of healthcare resources.[12]

The availability of low-cost IoT devices, combined with easier open integration capabilities, can significantly improve remote patient monitoring in TM. These allow for continuous tracking of patient conditions, providing real-time data that can help predict the evolution of health issues. This immediate insight enables healthcare providers to better plan doctor interactions and make timely adjustments to treatment plans.[13] By facilitating early interventions and more personalized care, these IoT-driven solutions can enhance patient outcomes while also reducing the overall burden on healthcare systems.

Developing more sophisticated algorithms for image analysis and diagnosis is essential for the future of TM. AI models trained on large and diverse datasets can greatly improve the accuracy and speed of diagnoses, particularly for medical imaging. For example, AI can detect early signs of diseases such as cancer or cardiovascular conditions,[14,15] allowing for remote diagnosis and quicker interventions. By cross-referencing patient data with populations that share similar comorbidities and disease progression, we can personalize and standardize treatments more effectively, ensuring that patients receive tailored care while maintaining consistency across similar cases.[16,17]

The protection of patients' personal data in TM is essential, especially as we move toward increasingly integrated systems. The use of advanced encryption and anonymization techniques, supported by AI, can protect sensitive information while facilitating faster access to critical patient data.[18] These processes must be automated and efficient to reduce the administrative burden on healthcare providers, allowing them to focus on patient care while maintaining compliance with data privacy regulations.[19,20]

The approach should be component-based, where a TM platform remains agnostic regarding the technology employed and the capability required to facilitate the relationship between patients and healthcare professionals. AI plays a crucial role by generating content and specific algorithms for programming machines. TM platforms can thus generate automatic suggestions and personalized content for each patient.[21]

Technologies are powerful enablers, but it is important to establish a framework that promotes robust standards, protocols, and especially cost controls. While these technologies are within arm's reach, costs can easily spiral out of control when scaled up.[22]

A flexible and iterative approach is crucial, as ongoing technological advancements will make it possible to continuously expand the platform's features over time.[23,24] This approach ensures adaptability and continuous improvement in response to technological advancements.

Database

In our experience, an excellent model of the latest generation databases for TM in any field of medicine is the Eumeda® TM platform (used since 2001).[25] This example, or another similar one, must be seen as a set of unique procedures between healthcare personnel and patients, making different projects work, each one built with its own particularities. IT decision-makers at health facilities and practitioners can select the platform to be used. It is highly likely that databases will allow cross-platform communications and data sharing, although unfortunately this is very difficult due, above all, to various technical issues.

The *access and view* are generated by a web-based platform that is accessible everywhere. It does not involve installing extra software, which would inevitably add complexity. The trend in the availability of cloud resources continues to move toward lower costs over time, making advanced computing power more accessible to healthcare providers.[26,27] Cloud platforms offer scalability that is virtually limitless and not constrained by geographical boundaries or country-specific infrastructure limitations. This allows TM platforms to grow and adapt seamlessly to increasing demand, ensuring that healthcare solutions can be deployed efficiently across different regions and populations, regardless of local infrastructure constraints. By leveraging cloud-based resources, TM becomes more cost-effective and universally scalable.[28]

Significant acceleration is achieved through the extensive fragmentation of data inputs, enabling each query to be addressed without processing large volumes of datasets. In practice, whenever a database request is initiated before completing the question-answer cycle, data transmission starts as soon as the essential minimum number of bytes is available, with the remainder downloading seamlessly in the background.

The *cycle of the executive data queries* should be as robust as possible. In the mechanism of the query-answer cycle between the computer interface and the database, the translator code should be correctly optimized in order to avoid latency and delays leading to an inefficient response.

The *secure data storage* is protected by the latest-generation professional servers located in certified data centers, which guarantee resilience to any type of failure including hardware malfunctions or the failure of entire physical nodes which are replicated at a separate certified data center. Furthermore, storage takes place with full Secure Sockets Layer (SSL) disks and daily backup with several recovery points. The data are also protected with individual access keys and by a special algorithm that combines encrypted personal data with clinical data only when accessing the service.[29,30]

To ensure flexibility, the platform operates through a central unit that connects and interacts with the system's core infrastructure—much like interlocking Lego bricks. This central unit manages access control, user credentials, permission tiers, areas of interest, and user profiles, all of which function independently. The modular design further enhances adaptability and performance, as database queries are directed exclusively at the specific tables relevant to each module.[25,31]

Cost reductions are made using a web-based platform without the need for the installation of any additional software, and open-source languages are used for the translator codes for queries and answers to the database, meaning there is no need to pay any fees.[32]

Real-life experiences

TM has a long history, at least in a few countries, and is not new but has rapidly increased worldwide recently since the COVID-19 pandemic era.[33] The TM entry barriers of the past (reliability, speed, and the costs of telecommunications) have been overcome, but solutions to new difficulties such as organization as well as resources and, above all, willpower must be found. Technological systems need to operate efficiently to support multiple access levels for storing and subsequently sharing data and images among healthcare institutions. This enables the full benefits of databases, such as enhancing patient involvement, improving treatment adherence, leveraging AI, and advancing scientific research. At times, technology can also help reduce bureaucratic complexity.[34]

TM is a polysemous term. Each meaning has its own peculiarities and sometimes there are no clear boundaries between them. The advantages and limitations of various board-executed TM projects presented below will hopefully be informative and can be extrapolated to all fields of medicine.

Telemonitoring and tele-research using the shared Eumeda® platform allow data collection from different centers for: (i) avoiding a loss of time and worsening of the condition, securing therapy in newly diagnosed diseases with direct appointments on the tablet application in real time from the territory to the medical center,[35,36] (ii) discerning the natural course of rare genetic diseases in young patients,[37] (iii) discovering the new spread of the virus through the ocular surface during the COVID-19 pandemic, suggesting the use of the slightly invasive conjunctival swab as a supplementary diagnostic test,[38] (iv) comprehending the risk factors for those who work at airports in relation to getting sick during the pandemic,[25] and (v) a better understanding of skull base surgery utilizing multidisciplinary methods.[25]

Teleconsultation between healthcare professionals for the benefit of patients allows correct therapies and advice on many diseases reducing hospital burdens and waiting lists.[25]

Televisits and tele-reporting enable the diagnosis and treatment process to be accelerated and also allow the automated choice of suitable packages of clinical tests to be carried out before the medical visit. This makes it possible to overcome shortages in healthcare professionals.[39]

Teletraining and second opinions for teaching and learning allow data and images to be visibly shared on a smartboard for residents and tutors at a distance. The instructor is able to address issues, review assessments, and forward them for consultation, instruction, or potential reevaluation of the clinical cases.[40,41]

Tele-research in oculomics. Oculomics explores the connection between ophthalmic biomarkers—alterations or irregularities in the eye—and systemic conditions such as diabetes and cardiovascular disease. The retina, which can be rapidly assessed through high-resolution tomography scans nearing cellular detail, serves as a valuable indicator for the status and progression of various internal organs not easily examined directly, such as the brain, microvascular system, and kidneys.[42]

A robust, shared database has been instrumental in enabling the large-scale collection of data on chronic conditions affecting all 10 human organ systems. By integrating this information with advancements in anti-aging medicine, it becomes possible to find the relationships between contributing factors and therapeutic responses. For each individual, all recognized aging-accelerating variables are documented and categorized, alongside retinal tomography images used for screening.[43,44] This methodology significantly shortens the learning curve, making decades of research and findings readily accessible in a collaborative framework that fosters collective effort and interdisciplinary engagement.

Teleassistance in an overlooked patient population. Premature retinopathy is a proliferative disease of the retina that occurs mainly in premature infants, with disastrous characteristics. The disease is easily treatable with timely and appropriate diagnosis.

Two decades ago, an “intelligent” diagnostic software was developed to incorporate key diagnostic criteria, enabling even users with limited clinical expertise to accurately identify the disease and prevent blindness.[45,46] This system has since progressed into the AI algorithms used today for direct diagnostic results.[47] Widespread deployment of this model requires moving beyond discussions regarding the availability of high-speed TM infrastructure, to exploring local education, experience, support, and costs.[48,49]

Telehomecare. In ophthalmology, tomography scans are essential for managing common retinopathies by guiding the timing of treatments and preventing blindness. However, despite effective therapies, only approximately one third of patients retain functional vision, largely due to poor compliance caused by the burden of frequent hospital visits.

Home-based tomography scans, on the other hand, are conducted at optimal intervals and provide continuous monitoring between clinic appointments.[50] Patients perform daily scans, which are analyzed by AI in the cloud to generate maps quantifying specific retinal lesions. Alerts are then sent to the physician, who makes treatment decisions accordingly.[51,52] For these benefits to reach patients, close collaboration between physicians and AI is crucial. The main challenge is that it is not enough to have AI, as we also need infrastructure, so a dedicated monitoring center that enables physicians and AI to work together is required.[50,52]

Sustainability, marketing, and finance

In TM, the product is needed first and foremost, but marketing and finance then play a key role. In essence, a project is needed that includes a driving force capable of conceiving, implementing, updating, and systematically innovating the initiative itself, a so-called supply ecosystem that contributes to the creation of the products that are part of it and their diffusion, and finally a market ready to welcome it, i.e., the end customers capable of understanding its value and paying the price.[53]

If this minimum core of basic conditions does not occur, we remain, without detracting from the scientific and academic quality of the innovations that can be started, in an unfortunately artisanal field and as such vulnerable to numerous difficulties (conceiving new useful projects, organization, bureaucracy, a suitable network culture, costs). To overcome them, I fear that the efforts of individual innovators are not enough unless appropriately channeled and integrated into industrial initiatives.[54]

Considering the costs and dedicated investments, an adequate estimate can be made generally only for structural expenses like travel, equipment, software, and servers. Each project presents different costs according to the technologies applied, informatic systems involved, and type and number of healthcare providers, as well as the duration of the project and location (emerging or developed countries). A business plan is always fundamental.

The payers could be classified according to their background: (i) Universities or nonprofit governmental sources pay for pilot studies or individual projects; (ii) Private industry or private funds (oil industry, pharma, airlines, etc.) support digital medicine projects each with their own advantages (increase commercial influence, open new markets, advertising); (iii) Healthcare systems (public or private): in this case, the new health procedure may be inserted in the standard of care and classified and economically valued.

We need more research on the cost-effectiveness and return on investment of TM projects investigating (i) the most effective strategies for evaluating the financial sustainability of TM initiatives, (ii) the cost-effectiveness of TM services compared to traditional healthcare models, (iii) how we can design TM platforms that are adaptable to different healthcare systems and resource constraints, (iv) how we can incentivize healthcare administrators and policymakers to invest in TM infrastructure and education maintaining quality and accessibility, and (v) how the growing demand for TM services will impact the infrastructure and resources of healthcare systems.[55,56]

We must direct funding toward education that brings more healthcare professionals into the workforce, and that equips software developers, data scientists, and specialists with the skills to create models and tools tailored to specific challenges. These will not be solutions repurposed from elsewhere, but ones designed specifically for unique needs. We must search for individuals who can work directly with patients in difficult settings—alongside them, close to them, and communicating with them—because technology on its own is not sufficient.[57]

We need to develop a hybrid approach, combining human empathy with supportive software tools. Therefore, the key principles of telemedicine projects are education and the awareness that you cannot be a truly effective doctor or take authentic care of patients if you do not love them.

Lessons learned

In the technological field, you need to organize not only the project you want to sustain, but also the type of technology for that particular project. Simplicity is a winner, as in the databases presented. For everyone, interconnectivity between software and robust standards is the key winning combination. In addition, generative AI can play a role. We have built new software for the storage and comparison of images. Technology must adapt and evolve continuously, as the average lifetime of software is less than 2 years in the absence of continuous updates of the various components.[58]

In the implementation area, clear preventive planning is a must, so that the software meets customer expectations during production and beyond. Sometimes it is better to pay for preventive software to verify its functioning, with the cost being deducted from that of the final software. We need to have technology experts and physicians working together, alongside one another, in building projects, in order to succeed. Technology can also bring complexities instead of capabilities.

In the clinical field, there is a need for TM platforms that increasingly offer automatic suggestions and personalized content for each patient. The presence of a doctor with some IT skills is also needed to direct the project. The quality control of each project is fundamental. Their evaluation in terms of access (ease of access), acceptability (satisfaction with procedures), data quality (accurate electronic health records), and medical efficacy (overuse or underuse of TM) must be obligatory.[36,59] Finally, we underline the importance of image quality, in uploads and downloads, to ensure a high standard of efficiency and effectiveness in remote consultations or AI applications.

The use of large language models (LLMs) in TM has the potential to dramatically reduce the burden of managing and exchanging high-quality information between patients and healthcare professionals, revolutionizing the way healthcare services are delivered. These models can streamline communication by automatically generating personalized content and suggestions, which enhances the interactions between patients and healthcare professionals both ways. Furthermore, LLMs can significantly reduce the time spent on collecting and harmonizing personal information, allowing healthcare professionals to focus more on patient care. This process also facilitates the anonymization of data, making it easier to comply with privacy regulations while ensuring that sensitive information remains protected.[60]

Scaling TM globally requires addressing cultural barriers to ensure effectiveness and accessibility. Beyond language, differences in values and healthcare norms, as well as privacy and trust in technology, play a key role. AI can adapt content to local customs and practices, improving engagement and reducing friction, including with real-time translation. It can also personalize care by tailoring recommendations to cultural factors like diet and local treatments, enhancing their relevance. Additionally, AI can support patient independence with culturally specific health tools, medication reminders, and appointment scheduling, aligning care with cultural expectations.

Liability is a new concern for many health professionals with the use of digital medicine and AI. The term “Artificial Intelligence”, coined in 1956, needs a clarification. “Intelligence” refers to collection and understanding data. “Artificial” means that the data are produced by many sources in an impersonal and synthetic way, hence the name AI, with all its current possibilities, but the final decision always belongs to the doctor. In this context we should focus on two main issues: the liability of the healthcare professional and of the facility.[61]

Regarding doctor liability, it should be noted that the same rules as in traditional medicine apply to telemedicine with AI, even though it presents specific and different risks, due to the complexity, innovation, and sophistication of the technologies used, which could lead to particularly difficult technical problems. Therefore, the doctor is responsible for incorrect decisions.

In the event that the poor outcome of the treatments is due to the inadequacy or malfunction of the machinery and/or telematic services utilized in telemedicine, a charge of liability may be brought not only against the subjects who created and supplied the equipment and technologies, but also the service center that manages the technologies, the health facility for having used malfunctioning technology, and the doctor who should have known about the deficit in the available technical means.[62,63]

To revolutionize the way in which healthcare services are delivered, we need to investigate (i) how we can develop more comprehensive and standardized evaluation frameworks to assess the effectiveness of TM programs and capture these effects, and (ii) the impact of TM on patient outcomes and health disparities as well as (iii) on healthcare workforce development and training.

In the financial sector it is necessary to automatize some administrative parts, move on a large scale with multiple small projects, and contain costs, which are not easy requirements. We need infrastructure. Funding for such initiatives comes from slow-moving governments or hospital administrations, pharma industries that have specific private interests, resource-constrained non-profits associations, or private entities that often do not see the immediate benefit to them. This is unfortunately the reality.

Conclusion

To ensure an effective implementation of telehealth services, there is a huge need to revise and conduct some re-engineering of current models of care. Digital transformation represents a cultural shift that must encompass new healthcare models, as well as process redesign, system restructuring, a deeper insight into human behavior, and enhanced digital competencies, as outlined in the WHO Global Strategy on Digital Health.[64]

An effort must be made to build a single standard to be applied among different strands of TM, taking into account some common TM standards and procedures that are applicable across diverse professions and specialties, and the need for specific ones for particular specialties and treatments. This may vary across countries as well as professions and specialties. This will require collaboration and coordination across multiple stakeholders, including healthcare administrators, policymakers, industry leaders, and researchers. One of the key areas requiring further investigation is AI, which is promising in TM but still in its infancy, and more research is needed to overcome the limitation of current AI systems.

The integration of TM into existing healthcare systems poses significant logistical and bureaucratic challenges for identifying the most effective strategies for scaling up TM projects while maintaining quality and accessibility. We need to encourage administrators and politicians toward this new vision of TM, an important branch of digital medicine, which is still not as widespread as it should be, considering that chronic diseases represent the true unbearable current and future burden for health systems globally and, therefore, the importance of investing in their prevention.[65]

To promote health equity, it is necessary that TM platforms should be designed to (i) address the social determinants of health and security, (ii) respond to pandemics and public health emergencies, and (iii) take into account the long-term effects of TM on patient outcomes and health disparities.

Climate change impacts on telemedicine and health equity in several aspects: new pathologies that may arise, as well as the presentation of "forgotten diseases" in areas where they are considered eradicated, the effect of immigration waves, and finally the need for dedicated instrumentation that must be treated in a "tropicalized" manner to be suitable in rural African or South Asian areas (if affected by temperature or humidity).[66–69]

In TM platforms, finding the right balance between human empathy and machinery/telemedicine services is crucial for providing effective patient care. While AI and digital tools offer unparalleled capabilities in diagnosing, monitoring, and predicting disease progression, they should serve as enhancers rather than replacements for human interactions. Patient-centered care and empathy remain a fundamental part of the healthcare professionals-patient relationship, ensuring that patients feel understood, supported, and treated beyond mere clinical outcomes. We also need to design TM platforms considering the impact on the mental health aspects of healthcare.[70]

Sustainability is a critical factor, and it is essential to develop business models that ensure the continuity of these projects beyond the initial funding period. The challenge is (i) to truly balance the need for immediate healthcare solutions with the need for long-term investment in research and development and (ii) to ensure that our TM platforms remain sustainable in the face of shifting global priorities.

TM services have significant limitations, such as (i) achieving long-term viability when the very fabric of our healthcare systems is constantly evolving, (ii) ensuring that our TM platforms remain relevant in the face of rapid technological advancements, emerging technologies such as artificial general intelligence, and quantum computing, (iii) assuring the accuracy of our databases when the very nature of human health is inherently probabilistic and uncertain, (iv) understanding the complex interplay between human genomes and the biological system, and (v) the need for continued research into the complex and intricate systems that govern human health.

TM is relatively new and presents many variables, so various aspects need to change along the way. It is tiring but rewarding when the desired results are achieved, as has happened to several degrees with the projects described above. A sentence from a Spanish poet sums up this concept: "Traveler, there is no path, the path is made by walking". It is time for us to take the next step in the journey toward a more equitable, accessible, and effective healthcare system.

Author note

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Ethical Consideration

Our manuscript doesn't require ethical committee approval as it represents the report of a RoundTable focused on Telehealth improvement topics, from informatic technology to communication, to health care providers involvement to equity and equality principles to be applied in all e-health projects.

Author contributions

All the authors Azzolini C, Boscher C, Capone A Jr, Donati S, Falco A, Oggionni F, Loewenstein A, Paolucci U, contribute equally to the manuscript as it is the results of each contribution to the round table at the U.N. Headquarters Conference. Each author expressed its own opinion and overview on different topic of the report.

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