TELEMEDICINE IN INDIA: FROM REGULATORY PERMISSION TO CONSTITUTIONAL OBLIGATION

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"Digital health must be governed by law, ethics and human rights"
- World Health Organisation, *Global Strategy on Digital Health (2020–2025)*

ABSTRACT

Telemedicine has emerged as one of the key advances, particularly during the post-COVID-19 period, and has circumvented the geographical barriers and enhanced access to medical services in a country whose medical care systems face limited coverage of more than 65 percent of its people residing in rural regions. Although its rapid growth has provided a lot of improvement in the delivery of healthcare, it has also disclosed some pressing regulatory issues. These are the ambiguities in medico-legal culpability, threats to data privacy and confidentiality, and not answered questions about professional liability, which has highlighted the necessity to have a well- developed and well-integrated legal framework to safeguard both patients and their healthcare providers. This chapter discusses these regulatory complexities in detail with a chronology of the development of telemedicine governance in India: where legal ambiguity prevailed and specific statutory guidance never existed to govern telemedicine, until the introduction of the Telemedicine Practice Guidelines, 2020 (TPG) in 2020, a landmark regulatory intervention incorporated an appendix to the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002.

Among the issues that have been examined, one can distinguish the incoherent regulatory ecosystem: the Information Technology Act, 2000, and its 2011 Rules on Sensitive Personal Data offer a structural backbone to cybersecurity and consent but is missing the telemedicine-related peculiarities, including the cross-jurisdiction consultations and electronic prescriptions. The Drugs and Cosmetics Act, 1940, also limits remote prescription of some Schedule X drugs, which contributes to the problem of access by chronic patients. Court skepticism is a judicial approach often characterized by judicial decisions that are skeptical. Judicial skepticism, as

typified by the decision of the Bombay High Court in Deepa Sanjeev Pawaskar v. Engineer of State of Maharashtra (2018), states that risks negligence during phone-based consultation, and argued to have more specific guidelines. Under the nascent Digital Personal Data Protection Act, 2023, which the issue of privacy presents itself large, but struggles to enforce but in low-resource environments. Implementation faces additional ethical dilemmas, such as informed consent when using video modes, vicarious liability of platforms, and the ethics of such implementation, as indicated by the National Medical Commission 2022 Draft Regulations.

Keywords: Telemedicine, Regulatory Framework, Medico-Legal Challenges, Data Privacy, Indian Medical Council Regulations, Telemedicine Practice Guidelines, Medical Negligence, Digital Health Ethics.

Introduction

In an era defined by rapid technological advancements, telemedicine represents a paradigm shift in healthcare delivery, enabling medical consultations and services across vast distances without physical presence. Derived from the Greek term "tele" (distance) and Latin term "mederi" (to heal), telemedicine encompasses health education, and administrative support in healthcare[1]. This innovation is particularly relevant in India, a country grappling with stark changes in healthcare access between areas, where over 70% of the population resides but only a fraction of specialized medical professionals is available[2].

The COVID-19 pandemic where lockdowns necessitated remote consultations to minimize infection risks. Prior to 2020, telemedicine operated in a regulatory gray area, leading to hesitancy among practitioners due to concerns over[1] liability and ethics. The issuance of the Telemedicine Practice Guidelines by the Board of Governors in supersession of the Medical Council of India (MCI), marked a significant milestone, formalizing its practice[2] and integrating it into the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002. This paper explores the evolution of telemedicine, its conceptual framework, benefits[3],

[1] Chandwani, R. K., & Dwivedi, Y. K. (2015). Telemedicine in India: current state, challenges and opportunities. *Transforming Government: People, Process and Policy*, *9*(4), 393-400.
[2] Bhalla, S. (2024). Evaluating the Legal Framework and Challenges of Telemedicine in India: Privacy, Liability, and Regulatory Compliance. *Jus Corpus LJ*, *5*, 153.
[3] Puri, A. (2024). Legal Challenges and Considerations in Implementing Telemedicine Services. *INTERNATIONAL JOURNAL*, *9*(9), 3453-3459.

challenges—particularly medicolegal and ethical issues—and the Indian[4] regulatory response.

Contribution of the Paper

This paper contributes to existing scholarship by reframing telemedicine not merely as a technological innovation or an emergency response mechanism, but as a constitutionally significant mode of healthcare delivery that necessitates enforceable statutory regulation. It advances a rights-based regulatory framework that integrates professional medical liability, platform accountability, and health-specific data protection within the broader contours of Indian health law and constitutional governance.

Historical Evolution of Telemedicine

Traces to the mid-20th century, initially driven by space exploration and military needs. In the 1960s, the National Aeronautics and Space Administration (NASA) pioneered[5] by transmitting physiological data from astronauts during space missions, using satellite technology to monitor vital signs remotely. This early application laid the groundwork for broader uses. By 1971, NASA collaborated with the U.S. Public Health Service to test satellite-based communication in Alaska, demonstrating how video consultations could enhance rural healthcare. Similar initiatives followed globally[6], such as Australia's Q-Network in 1984 for remote medical data transmission and Newfoundland's interactive audio networks for education in 1977.

In India, telemedicine's adoption began in the late 1990s, spurred by collaborations between institutions like the Indian Space Research Organization (ISRO) and Apollo Hospitals. ISRO's satellite-linked projects connected rural villages to urban specialists, enabling real-time consultations. By the early 2000s, programs like the Village Resource Centre initiative expanded telemedicine to underserved areas, focusing on specialties such as cardiology and oncology[7]. The 2018 review by Ateriya et al. notes that while telemedicine was initially experimental, advancements in mobile technology and internet penetration transformed it into a mainstream tool for convenience and necessity. Today, with over 1.4 billion people and

[4] Dash, S., Aarthy, R., & Mohan, V. (2021). Telemedicine during COVID-19 in India—a new policy and its challenges. *Journal of Public Health Policy*, *42*(3), 501.
[5] Mermelstein, H., Guzman, E., Rabinowitz, T., Krupinski, E., & Hilty, D. (2017). The application of technology to health: the evolution of telephone to telemedicine and telepsychiatry: a historical review and look at human factors. *Journal of Technology in Behavioral Science*, *2*(1), 5-20.
[6] Shirzadfar, H., & Lotfi, F. (2017). The evolution and transformation of telemedicine. *International Journal of Biosensors & Bioelectronics*, *3*(4), 303-306.
[7] Cipolat, C., & Geiges, M. (2003). The history of telemedicine. *Curr Probl Dermatol*, *32*, 6-11.

uneven healthcare distribution, "telemedicine has evolved from a novelty to an essential component of public health strategy, especially post-2020.

The journey of telemedicine globally dates back to the mid-20th century, with roots in space exploration and remote monitoring. Pioneered by NASA in the 1960s for astronaut health tracking via satellite transmissions, it expanded through projects like Alaska's satellite-based consultations in 1971 and Australia's Q-Network in 1984. In India, formal adoption began in the late 1990s, driven[4] by the Indian Space Research Organisation (ISRO). A landmark[8] initiative was the 2001 SATCOM-based pilot in Andhra Pradesh, linking rural[9] health centers to urban specialists. This laid the foundation for national programs such as the National Rural Telemedicine Network.

Integrated Disease Surveillance Project, supported by ministries including Health and Family Welfare and Information Technology.

By the mid-2000s, the government formed[10] a National Telemedicine Task Force and issued initial guidelines in 2005, focusing on infrastructure and standards. Private sector involvement grew, with entities like Apollo Telehealth establishing over 700 centers through public-private partnerships, serving millions in underserved[11] regions. Technological advancements, including wireless broadband and smartphones, enabled diverse applications like video conferencing and electronic medical records. Startups such[12] as Practo and Mfine further democratized access, offering app- based consultations.

The COVID-19 outbreak in 2020 marked a pivotal[13] acceleration. Lockdowns necessitated remote care to curb virus transmission, leading to a surge in platforms like e-Sanjeevani,

[8] Tihon, A. (2020). EVOLUTION AND DEVELOPMENT OF TELEMEDICINE. *The Coronavirus Pandemic and Critical ICT Infrastructure*, 3.
[9] Garshnek, V., & Burkle Jr, F. M. (1999). Applications of telemedicine and telecommunications to disaster medicine: historical and future perspectives. *Journal of the American Medical Informatics Association*, *6*(1), 26-37.
[10] Ismail, Y., & Ebinezar, S. G. (2025). A Review of Evolution and Applications of Telemedicine in Healthcare. *Journal of Pharma Insights and Research*, *3*(2), 043-052.
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[13] Jagarapu, J., & Savani, R. C. (2021, August). A brief history of telemedicine and the evolution of teleneonatology. In *Seminars in Perinatology* (Vol. 45, No. 5, p. 151416). WB Saunders.

which[14] facilitated millions[15] of consultations.

Conceptual Framework

The 2020 Guidelines, in the Indian context, define it in much the same way, focusing on its facilitation of care by Registered Medical Practitioners (RMPs) through means such as video, audio or text[16], although the broader term is telehealth, which encompasses other non-clinical services, such as administrative functions as well[17] as educational functions. The term virtual consultation is used to describe the process of obtaining medical opinions without necessarily visiting the patient in person[18], which often involves the sharing of electronic records. Among the most important ones are telemedicine specialty centers (where specialists live), consulting centers (prepared to transmit data), and systems consisting[19] of hardware (e.g. computers, scanners), data management software, and communication lines[20] such as Integrated Services Digital Network (ISDN) or Plain Old Telephony Service (POTS). There are technologies[21] that are classified as store-and-forward (images/reports transmitted asynchronously) and real-time interactive systems (e.g. video conferencing).

This definition, developed in the late 90s and repeatedly reinforced in subsequent issues of WHO documents, places a heavy[22] emphasis on the clinical aspect of telemedicine, with the central emphasis placed on diagnosis, treatment, and further fundamental healthcare tasks[23].

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[14] Imran, M. (2024). Telemedicine: Advancing Smarter by Evolution through Decades. *Asian Journal of Pharmaceutics (AJP)*, *18*(3).

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Telehealth, in its turn, is more extensive. The U.S. Health Resources and Services Administration (HRSA) and echoed in the discourse of nations worldwide by 2025, telehealth encompasses non-clinical services like provider training[24], administrative conferences, ongoing medical education, administration of public health, and patient education as well as clinical care[25]. Telemedicine has traditionally been considered a subliminant of telehealth in which the remote clinical services, including diagnosis and monitoring, are specifically managed[26].

Although in certain cases, such as the American Telemedicine Association, the terms have been used interchangeably, the difference is vital in matters of regulatory and reimbursements. The Telemedicine Practice Guidelines (2020), by the Board of Governors[27] in the place of the Medical Council of India in Indian context, is rather compatible with the WHO definition. They allow the Registered Medical Practitioners (RMPs) to offer medical care at home by the doctors registered in a legal register such as the State Medical Register or Indian Medical Register. The guidelines[28] do not explicitly describe telehealth but concentrate on telemedicine as the practice that would be used to consult a patient. The only difference between virtual consultation and traditional in-person visits is the distance; in most cases, it means reliance on electronic medical records transfer among doctors or direct interactions between patients and their providers without a physical presence.

By streamlining telemedicine as a regulated mode of clinical care rather than a technological exception, this framework emphasizes continuity of professional responsibility. Telemedicine is not a diluted form of medical practice but an alternative modality that must adhere to equivalent legal, ethical, and constitutional standards.

Key Components of Telemedicine Systems

A telemedicine system integrates[29] hardware, "software, and communication channels to

[24] Melton, S., Simmons, S. C., Smith, B. A., & Hamilton, D. R. (2020). Telemedicine. In *Principles of Clinical Medicine for Space Flight* (pp. 253-271). New York, NY: Springer New York.
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connect geographically separated locations. Core elements include:

Hardware: Computers, printers[30], scanners, videoconferencing devices, medical peripherals (e.g., digital stethoscopes, cameras for examinations).

Software: Applications for capturing patient data (images, reports, videos), secure storage, and transmission.

Communication Channels: Networks enabling data exchange[31], ranging from high-bandwidth options like Integrated[32] Services Digital Network (ISDN) to basic Plain Old Telephone Service (POTS).

Specialized centers play distinct roles:

Telemedicine Specialty Center: Location of experts who remotely[33] consult, review reports, and monitor[34] progress.

[30] Acheampong, F., & Vimarlund, V. (2015). Business models for telemedicine services: a literature review. *Health Systems*, *4*(3), 189-203.
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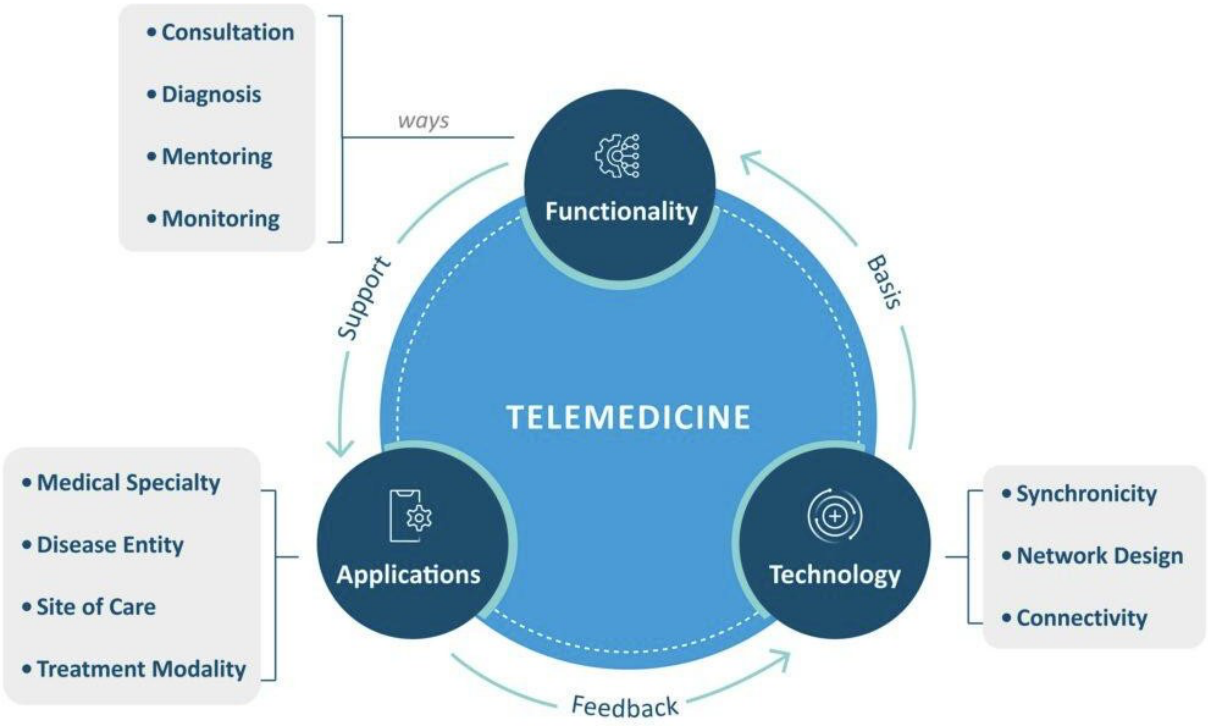
Telemedicine Consulting Center: Peripheral site equipped for data capture and transmission, often in rural or underserved areas:



Modes of Telemedicine Delivery

Telemedicine operates primarily through two technological approaches:

1. **Store-and-Forward (Asynchronous):** Medical is captured[35], stored, and transmitted for later review. Ideal for non-emergency[36] specialties like teleradiology, telepathology, or teledermatology, where consultations can be completed within 24-48 hours[37]. No real-time interaction is required.

2. **Real-Time (Synchronous):** Involves live interaction via two-way interactive television

[35] Danila, M. I., Sun, D., Jackson, L. E., Cutter, G., Jackson, E. A., Ford, E. W., ... & Saag, K. G. (2022). Satisfaction with modes of telemedicine delivery during COVID-19: a randomized, single-blind, parallel group, noninferiority trial. *The American Journal of the Medical Sciences*, *364*(5), 538-546.
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(IATV) or video conferencing. Patients (often with a local provider) connect[38] directly with specialists. Suitable[39] for fields requiring immediate dialogue[40], such as psychiatry, cardiology, or neurology.

Hybrid models combine both, alongside remote patient monitoring (RPM) and mobile health apps.

Telemedicine Applications in the Indian Framework

The 2020 Guidelines classify applications by:

- Mode of Communication: Video[41] (preferred), audio, text.
- Timing: Real-time[42] or asynchronous.
- Purpose: First consultation, follow-up, health education[43], counseling.
- Participants: Patient-to-RMP, caregiver-to-RMP, health worker-mediated[44], or RMP-to-specialist.

These classifications ensure appropriateness, with video recommended for comprehensive

[38] El-Tallawy, S. N., Pergolizzi, J. V., Vasiliu-Feltes, I., Ahmed, R. S., LeQuang, J. K., Alzahrani, T., ... & Nagiub, M. S. (2024). Innovative applications of telemedicine and other digital health solutions in pain management: a literature review. *Pain and therapy*, *13*(4), 791-812.
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assessments and text limited to follow-ups.

This conceptual framework underscores telemedicine's adaptability, enabling equitable healthcare delivery[8] in India's vast landscape[45]. By distinguishing clinical telemedicine from broader telehealth, it aligns global standards with national needs, facilitating regulated[46] growth while addressing ethical, technological, and access considerations. As of 2025, these definitions continue to guide policy, with ongoing refinements initiatives under government.

Benefits and Applications in India

Telemedicine offers multifaceted advantages, particularly in addressing India's healthcare inequities[47]. It facilitates easy—critical in a nation where rural populations often face[48] hours-long journeys to urban hospitals[49]. For instance," home-based monitoring for chronic conditions like diabetes enables ambulatory care, while critical care in emergencies ensures[50] timely interventions without patient transfer.

In public health, "telemedicine enhances disease surveillance, providing real-time data for epidemic prediction and risk factor analysis through Geographic Information Systems (GIS). It promotes equity by standardizing care across regions, as seen in ISRO's initiatives connecting sub- centers to specialists. Educational applications include continuing[51] medical education for practitioners, fostering knowledge exchange[52]. During disasters, it serves as a vital tool for coordination and awareness. Ateriya et al. highlight its role in improving doctor-patient

[45] Raj, D., & TK, S. (2021, June). Assisted telemedicine model for rural healthcare ecosystem. In *Companion Publication of the 13th ACM Web Science Conference 2021* (pp. 86-91).
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relationships through frequent, convenient interactions.

Medicolegal and Ethical Issues Challenges

Despite its promise, telemedicine faces significant hurdles, especially in medicolegal and ethical domains. A primary concern is the doctor-patient relationship[53], which traditionally relies on face- to-face interactions for building trust. Remote consultations may impede[54] this, raising questions about duty of care and liability. Informed consent is another critical issue; patients must be apprised of risks, data transmission methods, and alternatives, yet the virtual format complicates documentation. The 2018 analysis notes that while video consultations can equate to in-person ones in efficacy, consent's medicolegal validity remains ambiguous without standardized forms.

Privacy and confidentiality pose substantial risks due to electronic data vulnerabilities. The Hippocratic Oath mandates safeguarding patient information, but telemedicine's reliance on networks heightens breach possibilities. Product liability extends to manufacturers of hardware and software, while reimbursement issues persist, as no Indian insurance policies currently cover telemedicine explicitly. Rights of patients, including access to records and grievance redressal, must be upheld, but infrastructure gaps in rural areas exacerbate disparities.

Technological barriers[55], such as bandwidth limitations and the digital divide, further complicate adoption. In India, where internet penetration is uneven, low-bandwidth systems[56] like POTS suffice for basic audio but falter for video. Ethical dilemmas include potential over-reliance on technology[57], reducing physical examinations and impersonalizing care. Malpractice[58] liabilities arise if substandard treatment occurs[59], with unclear jurisdictional

[53] Agarwal, N., Jain, P., Pathak, R., & Gupta, R. (2020). Telemedicine in India: A tool for transforming health care in the era of COVID-19 pandemic. *Journal of education and health promotion*, *9*(1), 190.
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boundaries in cross-state consultations. These challenges deter widespread use, necessitating robust frameworks to mitigate risks.

Challenges: Medicolegal Issues

Telemedicine introduces unique medicolegal risks due to the absence of physical examination and reliance on digital interfaces[60]. Key challenges include:

- Professional Liability and Malpractice — Determining negligence is complex without in-person assessment[61]. Diagnostic errors may arise from poor video quality or incomplete history, raising questions on standard of care equivalence. Courts have applied similar[62] liability standards[63] as in-person consultations, but ambiguity persists in apportioning blame (e.g., RMP vs. platform).

- Informed Consent — Obtaining valid consent remotely is challenging, especially for vulnerable patients. Implied consent for follow-ups may not suffice in high-risk scenarios[64], potentially leading[65] to disputes over autonomy and comprehension.

- Doctor-Patient Relationship — Virtual interactions may weaken rapport, trust[66], and non-verbal cues, impacting therapeutic alliance[67] and increasing misconduct allegations.

- Jurisdictional Conflicts — RMPs" can consult nationwide, but state-specific licensing

[60] Mazzuca, D., Borselli, M., Gratteri, S., Zampogna, G., Feola, A., Della Corte, M., ... & Giannaccare, G. (2022). Applications and current medico-legal challenges of telemedicine in ophthalmology. *International journal of environmental research and public health*, *19*(9), 5614.
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variations and cross-state complaints create enforcement hurdles.

Challenges: Ethical Issues

Ethical dilemmas arise from balancing innovation with core principles of beneficence, non-maleficence[68], justice, and autonomy:

- **Confidentiality and Data Privacy** → Transmission of sensitive health data over digital platforms risks[69] breaches. Despite guidelines mandating[70] secure channels, third-party apps and inadequate encryption expose patients to unauthorized access.

- **Equity and Access** → While telemedicine aims[71] to reduce disparities, the digital divide excludes low-literacy, elderly, or rural populations without reliable internet/devices[72], exacerbating inequalities.

- **Diagnostic Accuracy and Over-Prescription** → Limitations in physical exams may lead to over- reliance on patient-reported symptoms, risking misdiagnosis or inappropriate prescribing.

- **Professional Integrity** → Resistance from practitioners unfamiliar with technology, potential conflicts of interest in platform-driven consultations, and ethical concerns over AI-assisted tools (currently restricted).

These issues are compounded by limited insurance reimbursement for virtual care and evolving data protection under the DPDP Act.

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Legal Framework in India

The legal framework governing by the Board of Governors in supersession of the Medical Council of India (MCI), now under National Medical Commission (NMC). These guidelines, appended to the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002, provide the regulatory structure for telemedicine, defining it as the delivery of healthcare services by registered medical practitioners (RMPs) using information and communication technologies w here distance separates the patient and provider[73]. They legalize remote consultations across text, audio, and video modes, emphasizing patient identification, informed consent, ethical standards equivalent to in-person care, and restrictions on prescribing certain medications to mitigate risks.

Eligibility under the TPG is broad: any RMP listed in the State or Indian Medical Register can practice telemedicine[74] without additional qualifications, though an online training program is planned for future implementation. Key provisions include mandatory self-identification[75] by the RMP, verification of patient details, and the discretion to choose consultation modes based on clinical needs[76]. Consent is implied for patient-initiated interactions but explicit (via email, text, or video) for those started by the practitioner. Prescribing follows categorized lists—over-the-counter (List O), low-risk drugs for first consultations via video (List A), refills (List B), and prohibitions on Schedule X narcotics or psychotropics—to ensure safety and prevent misuse. Documentation mirrors in-person requirements[77], including digital records of consultations, prescriptions with registration numbers, and fees with receipts. In emergencies, the focus shifts to advising immediate in-person care or referrals.

Post-2020 updates have integrated telemedicine with broader healthcare reforms. The National Medical Commission Act, 2019 (NMC Act), notified in September 2020, replaced the MCI and

[73] Bhalla, S. (2024). Evaluating the Legal Framework and Challenges of Telemedicine in India: Privacy, Liability, and Regulatory Compliance. *Jus Corpus LJ*, *5*, 153.
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enables nationwide practice by RMPs, removing state-specific barriers[78]. In August 2023, the NMC issued the Registered Medical Practitioner (Professional Conduct) Regulations, 2023, incorporating telemedicine guidelines, though these were placed in abeyance, reverting to the TPG and MCI Code. The Drugs and Cosmetics Act, 1940, and Rules, 1945, govern prescriptions,

validating e-prescriptions if digitally signed or scanned, with a 2022 draft amendment proposing over-the-counter status for select drugs to ease access.

A pivotal development is the Digital Personal Data Protection Act, 2023 (DPDPA), notified in August 2023, with draft rules released in January 2025 and finalized implementations rolling out by mid-2025. This Act establishes India's first comprehensive data privacy regime, classifying health data—including telemedicine records—as personal data vulnerable to "significant harm" if breached. RMPs and platforms act as "data fiduciaries," obligated to obtain verifiable, purpose- limited consent, provide multilingual notices on data usage and rights, enable access/correction/erasure, implement security measures like encryption, report breaches promptly, and restrict[79] international data transfers. Exemptions exist for legal, judicial, or research purposes, but significant fiduciaries (e.g., large telemedicine platforms) must conduct data protection impact assessments. The DPDPA aligns with the Information Technology Act, 2000 (IT Act), and Sensitive Personal Data or Information (SPDI) Rules, 2011, which treat health information as sensitive, requiring consent for processing by corporate entities.

Integration with national initiatives like the Ayushman Bharat Digital Mission (ABDM), formerly the National Digital Health Mission (NDHM) launched in 2020, enhances interoperability. ABDM promotes unique Health IDs, electronic health records (EHRs), and a federated[80] architecture for data sharing, governed by the Health Data Management Policy (HDMP), which mandates DPDPA compliance for consent, security, and fiduciary duties. The

[78] Jaiswal, M. S. N., & Bansode, M. S. S. (2025, June). REGULATING TELEMEDICINE IN POST-PANDEMIC INDIA: A CRITICAL LEGAL ANALYSIS OF EMERGING FRAMEWORKS AND CHALLENGES. In *National Conference*(p. 167).

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Telecom Commercial Communication Customer Preference Regulations, 2018, curb unsolicited promotions while allowing transactional messages. Separate guidelines exist for traditional medicine systems (Ayurveda, Unani, Siddha, Homeopathy) under respective councils.

The Supreme Court has consistently recognised health as an essential component of Article 21, holding that the right to life necessarily includes the right to timely and adequate medical care (*State of Punjab v. Mohinder Singh Chawla*, (1997) 2 SCC 83).

Despite these advancements, the framework lacks specificity for non-RMP stakeholders like platforms or AI tools, remote surgeries, research, or cross-border consultations. Judicial precedents, such as the Bombay High Court's 2018 ruling in Deepa Sanjeev Pawaskar v. State of Maharashtra (holding a doctor negligent for telephonic prescribing without diagnosis) and the 2021 Priyanka Singh case (prohibiting psychotropic e-prescriptions), underscore the binding nature of TPG, treating violations as professional misconduct under the NMC Act. As of 2025, ongoing alignments with DPDPA rules aim to fortify privacy in digital health, but gaps in enforcement and rural applicability persist," necessitating dedicated legislation for holistic regulation.

The 2020 Telemedicine Practice Guidelines: A Critical Overview

The 2020 Guidelines, prepared in partnership with NITI Aayog, outline a framework for RMPs to practice telemedicine ethically[81]. They define scope, emphasizing modes (video/audio/text), timing (real-time/asynchronous), and participants (patient-RMP, caregiver-RMP, or inter-specialist). Key elements include appropriateness assessments, patient identification[82], consent (implied or explicit), evaluation, and management, with duties like maintaining confidentiality and digital records.

The framework categorizes consultations: patient-to-RMP, caregiver-to-RMP, via health workers, or RMP-to-specialist[83]. Platforms must ensure privacy, verify RMP credentials, and comply with data protection laws. Special responsibilities for the Board of Governors include

[81] Dinakaran, D., Manjunatha, N., Kumar, C. N., & Math, S. B. (2021). Telemedicine practice guidelines of India, 2020: Implications and challenges. *Indian journal of psychiatry*, *63*(1), 97-101.
[82] Portnoy, J., Waller, M., & Elliott, T. (2020). Telemedicine in the era of COVID-19. *The Journal of Allergy and Clinical Immunology: In Practice*, *8*(5), 1489-1491.
[83] Venkatesh, U., Aravind, G. P., & Velmurugan, A. A. (2022). Telemedicine practice guidelines in India: global implications in the wake of the COVID-19 pandemic. *World Medical & Health Policy*, *14*(3), 589-599.

oversight and updates. While these guidelines legitimize telemedicine, they are not exhaustive[84], lacking enforcement mechanisms and addressing only MCI-registered practitioners, excluding allied health professionals.

Key Features of the 2020 guidelines:

Telemedicine Practice Guidelines -The Guidelines were issued amendment to the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002. Important provisions include:

1. First consultation can be done via video, audio or text (no mandatory physical meeting).
2. Doctors can prescribe medicines from List O (safe list) in first consultation; Lists A, B, C for follow-ups only.
3. All consultations must be recorded and stored for 3 years.
4. Patient consent must be explicitly obtained before every consultation.
5. Only registered medical practitioners (RMPs) under the IMC Act can practise telemedicine.
6. Penalties for violation are the same as for physical practice misconduct.
7. Legally recognised video, audio and text consultations.
8. Protected doctors from earlier legal risks.
9. Made e-prescriptions valid under the Drugs and Cosmetics Act.
10. Enabled rapid scale-up: e-Sanjeevani alone handled over 2.8 crore consultations by December 2025.
11. Major Criticisms and Gaps (Critical Analysis) Despite the positives, the Guidelines suffer from serious shortcomings: a) Prescription restrictions are too rigid Lists A, B, C prevent doctors from prescribing even simple antibiotics or anti-hypertensives in the first

[84] Shah, E. D., Amann, S. T., & Karlitz, J. J. (2020). The time is now: a guide to sustainable telemedicine during COVID-19 and beyond. *Official journal of the American College of Gastroenterology| ACG*, *115*(9), 1371-1375.

consultation, forcing patients to visit hospitals during a pandemic. b) No clarity on cross-state practice A doctor registered in Kerala can treat a patient in Bihar, but the Guidelines are silent on whether he needs registration in both states. This creates confusion after the National Medical Commission Act, 2019. c) Absence data protection safeguards The Guidelines only say "maintain confidentiality" but do not incorporate[20] the Digital Personal Data Protection Act, 2023 or specify encryption policy. d) No regulation of platforms Corporate telemedicine platforms (Tata 1mg, MFine, etc.) are not required to register with NMC or disclose algorithms used for triage. e) Language and accessibility barriers The Guidelines are available only in English, ignoring the linguistic diversity of India. f) No liability framework for technology failure If a video call drops during an emergency consultation, who is liable? The Guidelines are silent Post-2020 Developments and Judicial Interventions In 2022, the Madras High Court in Dr. K. Karthikeyan v. Union of India directed the NMC to frame comprehensive regulations. In 2023, the Supreme Court in Telemedicine Association of India v. Union of India asked for a graded prescription list and mandatory platform registration. The NMC released draft regulations in July 2024, but they are still pending final notification as on December 2025.

Recommendations for a Stronger Regulatory Framework To make telemedicine sustainable in India, the following reforms are urgently needed:

- Introduce a four-list prescription model (List O, A, B, C + emergency list).
- Allow automatic cross-state practice for RMPs once the National Register is fully operational.
- Mandate platforms to register with NMC and disclose AI algorithms.
- Incorporate DPDP Act 2023 and ISO 27001-level data security.
- Create a dedicated Telemedicine Grievance Redressal Cell under NMC.
- Translate Guidelines into 22 scheduled languages and provide voice-based consultation for illiterate patients.
- Introduce mandatory third-party insurance for telemedicine consultations.

Recommendations

To ensure that telemedicine in India evolves as a safe, equitable, and accountable mode of healthcare delivery, the following **seven implementable reforms** are proposed:

1. **Enact a Dedicated Telemedicine Statute**

   Parliament should enact a comprehensive Telemedicine Act that consolidates professional standards, platform obligations, data protection duties, and grievance redressal mechanisms. Reliance on non-statutory guidelines must be replaced with enforceable legal norms to ensure regulatory certainty and accountability.

2. **Automatic Nationwide Recognition of Medical Registration**

   Once the National Register under the National Medical Commission framework is fully operational, registered medical practitioners should be permitted to provide teleconsultations across state boundaries without additional licensing, thereby eliminating jurisdictional ambiguity and access barriers.

3. **Mandatory Registration and Regulation of Telemedicine Platforms**

   All telemedicine platforms should be mandatorily registered with the National Medical Commission, with clear disclosure obligations relating to ownership structures, algorithmic triage systems, data storage practices, and complaint-handling mechanisms.

4. **Health-Specific Data Protection Obligations**

   The Digital Personal Data Protection framework should be supplemented with sector-specific rules for health data, mandating encryption standards, data minimization, breach notification protocols, and periodic audits for telemedicine platforms and service providers.

5. **Graded and Flexible Prescription Protocols**

   The existing rigid drug categorization under the Telemedicine Practice Guidelines should be replaced with a graded, specialty-sensitive prescription framework, including a narrowly tailored emergency list, to prevent unnecessary in-person consultations and

improve continuity of care.

6. **Mandatory Professional Indemnity Insurance for Telemedicine**

   Registered medical practitioners and platforms offering telemedicine services should be required to maintain professional indemnity insurance covering technology-related errors, platform failures, and remote diagnostic risks.

7. **Institutionalized Grievance Redressal Mechanism**

   A dedicated Telemedicine Grievance Redressal Cell should be established under the National Medical Commission to provide swift, specialized adjudication of patient complaints, reducing over-dependence on consumer courts and criminal litigation.

Conclusion

Telemedicine in India has evolved from a marginal technological intervention into a central mechanism of healthcare delivery, particularly in the post-pandemic era. The Telemedicine Practice Guidelines, 2020 played a pivotal role in legitimising remote medical consultations and reducing professional uncertainty. However, this paper establishes that the existing regulatory framework remains fragmented, non-statutory, and normatively inadequate to address the structural medico-legal, ethical, and data-governance challenges posed by platform-mediated healthcare.

The current reliance on dispersed legal instruments such as the Information Technology Act, the Drugs and Cosmetics Act, and professional ethics regulations reflects a regulatory architecture never designed for digital health ecosystems. As a result, critical issues relating to cross-jurisdictional medical practice, platform accountability, technology-induced negligence, and enforceable standards of informed consent remain unresolved. Although the Digital Personal Data Protection Act, 2023 introduces a rights-based privacy regime, its generalist design does not sufficiently account for the heightened sensitivity, vulnerability, and power asymmetries inherent in health data processing.

From a normative standpoint, telemedicine must be recognised not as an auxiliary innovation but as an integral dimension of the constitutional right to health under Article 21. Regulatory responses must therefore transition from permissive guidelines to enforceable statutory

obligations that prioritise patient safety, accountability, and substantive equality. The State bears a positive obligation to ensure that digital health expansion does not exacerbate exclusion arising from infrastructural deficits, digital illiteracy, or platform-driven commercialisation of care.

Looking ahead, the enactment of a comprehensive Telemedicine statute is imperative. Such legislation should harmonise professional liability norms, platform regulation, data protection compliance, insurance coverage, and grievance redressal within a unified framework. Only through normative clarity and institutional accountability can telemedicine fulfil its transformative potential in advancing equitable, rights-based healthcare governance in India.

Future regulatory frameworks must also anticipate emerging issues such as AI-assisted diagnosis and algorithmic triage in telemedicine.