DOCTOR ON CALL

TELEMEDICINE PRACTICE GUIDELINES, TERMS AND CONDITIONS

Virtual, Primary and Urgent Care also Specialist Ambulatory and Follow-up Care:

(Doctors, Dentists and Allied Medical Professionals)

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Introduction

This document consists of several Telemedicine practice guidelines, Terms and Conditions which were partly adopted and adapted from the American Telemedicine Association's peer reviewed Publication wherever it was assessed to be applicable. Further, the document has also incorporated an updated set of telemedicine practice guidelines, terms and conditions derived from 22 years of research and development of the National Telemedicine Research and Development Project in Jamaica. As such it ensures compliance with medico-legal, ethical, regulatory, and international standards for the practice of Medicine, Dentistry, and the Allied Medical Professions in virtual space in Jamaica and the Caribbean.

The development of the "Doctor on Call" Telemedicine platform and model is the outcome of 22 years of the research and development project implemented by Public Health and Health Technology Specialist Professor Winston G. Mendes Davidson and his research partner of 20 years, Mr. Sanjeev Kumar Rangaiah. Together, they achieved the vision of a Universally accessible and affordable telemedicine platform for ALL patients, anytime anywhere.

This vision was inspired by the 1978 United Nations Alma Atta declaration of "Primary Health Care for All, by the year 2000" which was never achieved at that time anywhere in the World.

As a founding member and the former Secretary of the American Telemedicine Association's Latin American and Caribbean Branch, Professor Mendes Davidson continues to keep abreast of the ATA's publications and continues to be a part of the leadership of the Telemedicine Research and Development Agenda in Jamaica and the Caribbean.

Over the years, "Doctor on Call" has kept pace with and applied products and processes derived from the rapid developments and changing landscape in the applications of information and communication technology products to medicine throughout the world.

This has culminated in the present publication of the latest iteration of "Doctor on Call", a telemedicine platform model which presently locates itself as a stable, cutting edge, user friendly, contemporary telemedicine health service system platform. This platform is represented as the essence of the stable core functions of a strategically developed and scalable telemedicine model. This model already has a series of updates in the making in preparation for early release. This is in keeping with the unrelenting research and development culture of "Doctor on Call", which process will continue to upgrade its functions indefinitely in keeping with the advances in information and communication technology.

A. Regulatory and Licensure Requirements

Providers **shall conform with** National Legal and Regulatory conditions of an up-to-date practitioner license by the respective Professional Councils in the respective Jurisdiction of Jamaica and the Caribbean. Requirements related to their scope of practice, and areas of specialization **may** be validated by evidence of memberships in the respective professional specialist associations. An up-to-date practitioner's license from the respective provider's Professional Council is the only criteria necessary to access the Doctor on Call telemedicine platform free of any cost to the provider.

B. Informing and Educating the Patient

Prior to the initiation of a telemedicine encounter, the provider **shall participate** in a free training webinar for telemedicine certification. The provider **shall** inform and educate the patient (either in writing or verbally) about the nature of telemedicine service compared to in–person care. This **shall** include discussion of the nature of a telemedicine encounter, timing of service, record keeping, scheduling, confidentiality, privacy and security, potential risks, mandatory reporting, the credentials of the distant site provider and billing arrangements. The information **shall** be provided in simple language that can be easily understood by the patient.

This is particularly important when discussing technical issues like encryption or the potential for technical failure. More specifically, this information **shall** include the limits to confidentiality in electronic communication; an explicit emergency plan, particularly for patients in settings without access to clinical staff; a process by which patient information will be documented and stored; the potential for technical failure; procedures for coordination of care with other professionals; a protocol for contact between visits; prescribing policies including local and federal regulations and limitations; and the conditions under which telemedicine services may be terminated and a referral made to in-person care.

Finally, the provider or designee **should** set appropriate expectations regarding the telemedicine encounter, including for example, prescribing policies, scope of service, communication, and follow-up. To reduce the risk of overprescribing, the provider **shall** follow evidence-based guidelines and all National and regional regulations.

Telemedicine in the Practice of Primary and Urgent Care also Specialist ambulatory and patient follow-up Care

For purposes of this document, primary and urgent care is defined as the delivery of basic non-specialty care outside a hospital emergency department when a patient is deemed in need of immediate medical attention. This type of care is typically unscheduled and episodic and is not always provided by the patient's regular primary care provider. Primary care typically implies a longer-term relationship between patient and provider, wherein the provider is usually familiar with the patient's health history.

Specialist care may not only be delivered as follow-up care but with the increasing applications and use of blue-tooth mobile diagnostic and monitoring instruments and gadgets, the vast explosion of the internet of things and 5G technology all indicate the necessity for present and future participation of specialists in Telemedicine service delivery.

Both acute and chronic diseased states and conditions may present with symptoms that range from mild to severe. Acute medical conditions may be managed effectively by video-based telemedicine and other interactive technologies which may also be supported by peripheral devices and ancillary tests necessary to establish a diagnosis.

Uncomplicated cases of allergy/asthma, chronic bronchitis, conjunctivitis, genitourinary conditions, low back pain, otitis media, rashes, and upper respiratory infections are long established cases managed by telemedicine. Chronic medical conditions addressed by telemedicine within primary care practices may include mental illness and behavioral health, chronic obstructive pulmonary disease, congestive heart failure, diabetes, and hypertension. The virtual clinical encounter is also an appropriate method for consultations regarding public health prevention and wellness services such as immunizations, smoking cessation, diet, and physical activity.

Prescribing by designated Providers

Prescribing is generally accepted by the National Regulatory Professional Councils in the Jamaican and Caribbean which are: The Medical Council of Jamaica (MCJ), representing the Medical Profession and the Dental Council of Jamaica (DCJ) representing the Dental Profession. Members of the Council of Allied Medical Professions (CAMP) are not authorized to write prescriptions on the Doctor on Call telemedicine platform because of the absence of judicial and professional regulatory authority.

Prescribing on the Doctor on Call telemedicine platform is demonstrated to conform with the highest International standards required for e-prescriptions. Most importantly it demonstrates the highest-level confidentiality and privacy in generating, transmitting management of the prescription to each patient. The transmission is immediate and in real-time, signed by the provider with all the checklist of internationally verifiable standardized prescription present. Doctor on Call also has a unique QR-Code on the prescription transmitted to the patient's video-consultation device only. This prescription may then be passed on by the patient to the Pharmacy or Pharmacist of their choice. Doctor on Call is the virtual extension of the provider's office practice and hence data integration and storage of the information is not only in the Cloud but may also be integrated within the patient's office notes if the need arises. All prescriptions may only be retrievable by the provider who shall make the data available to the patient as is. All data is stored in the Cloud.

Clinical Guidelines for Screening by Artificial Intelligent Robot (DOC-BOT)

The Doctor on Call use of an Artificial Intelligent robot, taken by itself will never be relied on to make a diagnosis. Only the diagnosis of the Doctor or Dentist will be accepted as valid on

the Doctor on Call platform and documented as such. The use of AI is as a pre-diagnostic screening tool. Its data must be further distilled by the provider by incorporating the data from the virtual clinical encounter. The provider alone is authorized to make a diagnosis based on the International Codes for Diseases (ICD) 10 Standard.

Doctor on Call has successfully tested the use of an Artificial Intelligent (AI) pre-diagnostic Screening Robot (BOT) with over 3,000 patients over a four-month period incorporating the Covid19 clinical standards. The integration of the DOC-BOT in the web portal of every provider will ensure the white labelling of the DOC-BOT into the web portal of all providers and will become standard practice on the Doctor on Call telemedicine platform. This screening will take place while the patient waits in the virtual Lobby of the provider's portal. To protect the confidentiality of the patient the AI pre-diagnosis will be converted into a globally unique identification (GUID) and only the provider will have access to the real identity of the patient and the outcome of the AI's pre-diagnostic screen.
The AI's infrastructure is derived from the standard ICD 10 codes which is an embedded component of its algorithm ensuring compliance with the internationally acknowledged standard procedure as part of the international quality of the Doctor on Call telemedicine platform. Full implementation of this feature will be evident following the next iterative update of the Doctor on Call platform.

A. Physical Environment

The provider **shall** determine the minimal acceptable levels of privacy, lack of distraction and background noise, and other environmental conditions that may affect the quality of the encounter, when video-based services are offered. The provider's and the patient's room/environment **should** ensure privacy to prevent unauthorized access. Seating and lighting **should** be designed for both comfort and professional interaction. Both provider and patient **should** be visible and heard. Patients receiving care in non-traditional settings **should** be informed of the importance of reducing background light from windows or light emanating from behind them. Both provider and patient cameras **should** be placed on a secure, stable platform to avoid wobbling and shaking during the videoconferencing session. To the extent possible, the patient and provider cameras **should** be placed at the same elevation as the eyes with the face clearly visible to the other person.

B. Referrals and Emergency Resources

The provider **shall** have an emergency or contingency plan that is communicated to the patient in advance of the telemedicine encounter.

The provider **should** be familiar with or have access to available medical resources in proximity to the patient to make referrals or request transfers when indicated.

C. Cultural Competence

Telemedicine providers and their staff **shall** deliver services in a culturally competent manner that considers the patient's age, disability status, ethnicity, language, gender, gender identity and sexual orientation, geographical location, language, religion, and socio-economic status.

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Provider and patient or patient-representative **should** be able to converse in a language comfortable and familiar to both parties allowing the provider to obtain a clear history and the patient/representative to understand the recommendations provided. If necessary, a translator (or signer for deaf/hearing impaired patients) **should** be used.

I. Telemedicine Management of the Patient

Telemedicine providers **shall** determine the appropriateness of telemedicine on a case-by-case basis, whether a telemedicine visit is indicated, and what portion of the examination must be performed and documented in conformance with appropriate standards in evaluating the patient. Wherever possible, diagnostic interventions **should** be

supported by high quality evidence. Where evidence is lacking, providers **shall** use their professional judgment, experience, and expertise in making such decisions. Conditions for use of telemedicine are likely to change to reflect new evidence from future research and the evolution of the enabling technology.

Telemedicine providers **shall** be cognizant of establishment of a provider-patient relationship in the context of a telemedicine encounter, whether using synchronous or asynchronous modes of communication/interaction makes a difference, and they **shall** proceed accordingly with an evidence-based standard of care. If not previously established, a provider-patient relationship **may** be established where the provider is guiding the process of care. The provider **shall** use their professional judgment and conform to all national and regional regulations in determining whether a provider-patient relationship has been established and whether it is sufficient to proceed with an encounter and make diagnostic and treatment decisions including prescribing. In the event the patient does not have a primary care provider, the provider **should** recommend options to assure continuity of care for the patient. Provider practices **should** establish standard operating procedures and workflows for telemedicine visits consistent with prevailing norms.

Telemedicine management of the patient **may** involve establishment of a diagnosis and treatment plan, or it **may** result in a referral to a medical facility for further evaluation and/or treatment.

Clinical protocols **should** be developed for live, on demand services. Such protocols are beyond the scope of these guidelines and practitioners are advised to review specialty society guidelines and the evidence published in the peer-reviewed literature. However, protocols **should** include the following components:

1. Named condition and corresponding ICD code.
2. Scope of condition amenable to treatment by telemedicine based on medical evidence, or at a minimum, precedent for successful management based on peer-reviewed guidelines or expert opinion.
3. The mode of intervention required to diagnose and treat the condition (i.e., under what circumstance and regulatory framework is telephonic care adequate, is videoconferencing required, are peripheral devices needed or other diagnostic tests, or is an in-person visit needed).
4. Documentation required to appropriately assess the patient's condition including history and any video-based examination including required components needed to visualize, demonstrate, or test.
5. Parameters under which the condition can be treated.
6. Parameters under which the condition may not be treated and require referral to alternate modes of management; and
7. Parameters under which prescribing can and cannot be done.

A. Patient Evaluation

Patient examination should be commensurate with the level of assessment required to manage a patient, taking into consideration the technical quality and extent of information that **may** be elicited remotely. This evaluation **should** be supported by clinical history, access to the patient's medical record where possible, diagnostic data (e.g., obtained via self-report or access to store and forward databases) and laboratory test results

and peripheral devices for patient physical examination when appropriate.

Audio-based evaluation **may** be used for consultation, if and only if the evaluation, diagnosis, and treatment of conditions can be made reliably based on complete medical history, full understanding of presenting symptoms reported by the patient or caregiver and be consistent with established clinical protocols, state and federal laws and regulations related to audio-based evaluations, when such evaluation results in prescribing.

The telemedicine provider **should** obtain all the data necessary for a diagnosis and treatment plan. Necessary items include:

1. Identifying information
2. Source of the history
3. Chief complaint(s)
4. History of present illness (including location, description, size, quality, severity, duration, timing, and context modifying factors)
5. Associated signs and symptoms
6. Past medical history
7. Family history
8. Personal and social history
9. Medication review
10. Allergies including medication, nature, and severity of reaction
11. Detailed review of symptoms
12. Provider-directed patient self-examination to include the use of peripheral devices as appropriate.

Documentation **shall** be performed following each patient encounter and **shall** be maintained in a secure, HIPAA (Health Insurance Portability and Accountability Act) compliant form and location (e.g., paper/fax, server, cloud).

Following every visit, the provider **shall** communicate results of the encounter to the patient's primary care provider or other specialty providers using secure methods (e.g., email/fax, secure email, transmit to EMR), as well as to the patient, unless the patient has requested a limitation on such communication. An appropriate disposition **shall** also be discussed with the patient including any required follow up and discussion of clinical signs that would signify a significant escalation. Laboratory tests, including diagnostics ordered in the usual course of evaluation **shall** be followed up in a timely manner with the patient and any additional providers as needed.

B. Physical Examination

The provider **shall** perform a virtual physical examination as indicated by the patient complaint and medical history and other relevant information reported by the patient conforming to the standards of medical practice and provided by a credentialed and qualified practitioner. This examination **may** include a demonstration or an explicit physician-guided self-examination which, as appropriate, **may** include peripheral devices. Where additional diagnostic testing is required to confirm the diagnosis, the provider **shall** recommend to the patient that such testing be performed in accordance with standards of medical care.

I.   Quality

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The provider **shall** employ a coordinated quality improvement program or clinical oversight process.

A. Quality Review

Quality review **should** be conducted on a periodic basis to identify specific risks and qualify failures. It **should** include assessment of:

- equipment or connectivity failures
- number of attempted and completed visits
- patient and provider satisfaction with the virtual visit
- patient or provider complaints related to the virtual visits (e.g., via surveys)
- measures of clinical quality such as whether the visit was appropriate for a virtual encounter
- recommendations consistent with appropriate standard of care

Unless there is an external requirement for recording a virtual visit, the provider **may** opt not to record the visit. If he/she chooses to record the encounter for quality or training purposes, it **shall** comport with appropriate consent and privacy/security measures (see Technical Considerations below).

B. Provider Training and Mentoring

Provider orientation and training should entail a thorough review of history taking skills and physical examination skills as they pertain to the evaluation of a patient through telemedicine. Providers **shall** know current local and state laws as they pertain to telemedicine practice. They **shall** obtain the necessary training and education for themselves and/or staff to ensure maintaining technical and clinical competence in accordance with their discipline. Providers **should** conduct several "dry run" visits with test "patients" to become familiar and comfortable with the technology of virtual visits and be generally familiar with the nature of the technology the patient is using to direct and assist with minor technical questions and potential problems that may arise. The provider **should** also be familiar with and proficient with a satisfactory default mode for patient engagement should technology fail during a patient encounter. Those new to telemedicine are encouraged to identify a mentor to observe during telemedicine encounters. This can also be done post hoc by a video recording. Proctored visits **should** include a variety of conditions, and modes of encounter (e.g., phone, web, mobile). Protocols regarding indications when care should be escalated, and provision for escalating patients when necessary to alternate modes of care should be established, documented, and communicated as part of the provider orientation process. The effectiveness of these guidelines should be assessed routinely by the provider entity as part of their standard quality review process.

II. Ethical Considerations

Practicing at a distance requires the same attention and adherence to professional ethical principles-as would an in-person encounter. Telemedicine providers **should** incorporate ethical statements and policies into their standard operating procedures.

The following are the ethical guidelines for health professionals engaged in telemedicine:

1. A practitioner **shall** uphold the code of ethics for their profession and be aware of the codes for other professional disciplines.
2. A practitioner **shall** abide by all national and regional jurisdictional laws and regulations, and institutional policies.
3. Telemedicine **shall not** be employed as a means of preferentially avoiding in-person encounters based on geographic location, socio-economic status, disease, or disability

gender preferences or sexual orientation, behavioral factors, ethnicity, religion, etc. An exception to this rule **may** be the avoidance of in-person visits during epidemics or pandemics to avoid the spread of infectious disease.

4. Payment made by the patient **should not** be conditional on receiving a certain diagnoses or treatment, such as receipt of a prescription.
5. Providers **should** abide by a strict conflict of interest policy that deters the use of tele practice for the sole purpose of enhancing income.
6. Providers **shall**:
   a. Apprise patients of their rights when receiving telemedicine, including the right to suspend or refuse treatment.
   b. Apprise patients of their own responsibilities when participating in telemedicine.
   c. Inform patients of a formal complaint or grievance process to resolve ethical concerns or issues that might arise because of participating in telemedicine.
   d. Discuss the potential benefits, constraints, and risks (e.g., privacy and security) of telemedicine.
   e. Inform patients and obtain their consent when students or trainees observe the encounter.
   f. Groups of providers **should** avoid cartelization in the setting of fees by individual providers for services to patients
   g. The splitting of fees between providers **shall** be prohibited in the delivery of professional services by the provider to the patient
   h. Providers **should** ensure that each patient is informed and knows the cost of the service and settles the bill prior to the virtual clinical encounter.
7. Providers **should** have a policy in place concerning the disclosure to patients of technology or equipment failures during service sessions, the contingency plans in case of technical failure, and document such events in the patient's health record.

III. Emergencies

A. Definition of Emergent Conditions

An emergent condition is an illness or injury that poses an immediate threat to a person's life or long-term health. Such conditions are outside the scope of a primary and/or urgent care telemedicine practice. Telemedicine is NOT and Emergency Medicine platform and in the clinical judgement of the provider all emergency medical patients should be referred immediately to an emergency medical facility.

B. Emergent Patient Evaluation and Referrals

The provider **shall** assess a presenting patient's condition to determine severity and acuity of the patient's condition, and when indicated, refer the patient to the appropriate level of care accessible to the patient. The telemedicine provider **shall** be responsible for triaging the patient to the appropriate level of care (e.g., PCP, specialist, urgent care, ED). Providers **may** consider incorporating standard triage protocols in their telemedicine practices.

C. Documentation of Emergent Encounters

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The provider **shall** document the process for treating emergent situations which **may** include phoning the receiving facility in advance of the patient's arrival.

Providers **shall** document all referrals to EMS (Dialing 911) including the medical indication/basis for the recommendation, and nature of the problem.

Providers **should** document the location of the patient at the start of the encounter.

Providers **should** document any extenuating circumstances or adverse events, be they technical or clinical, which occurred during the encounter.

Documentation **should** adhere to all medical-legal standards of care, and if appropriate, insurance requirements for future review and audit.

IV. Follow-Up

As noted previously, follow-up is a critical aspect of patient safety and continuity of care and **should** include the following:

A. Knowledge of the Patient's Healthcare Network

The provider **should** have knowledge of the patient's healthcare network whenever possible, to be able to facilitate timely access to recommended specialty consultations or referrals.

B. Provision of Clinical Reports to Referral Sources

The provider, to the extent possible while being remote, **shall** make available relevant clinical reports to the referral institution or specialist absent a request by the patient to the contrary.

C. Transmission of Home Monitoring and Electronic Data

If feasible, the provider **should** facilitate transference of any home monitoring or electronic data and discuss with the patient how and if such data will be stored.

D. Patient Requests for Records

The provider **shall** establish an explicit process for patients to request copies of their telemedicine encounters at their request and to facilitate specialty care, where indicated.

V. Special Populations

Virtual visits can be conducted with patients with unique needs such as those with communication disorders, mental or physical disabilities, sensory disorders, or special needs related to age, gender, culture, rare diseases, or location of care. Some **may** need a translator or facilitator that calls for non-medical personnel during the visit. These populations often require special considerations to ensure their engagement in the care process and follow-up and their needs are met appropriately.

A. Pediatric Encounters

Each pediatric encounter requires the presence and/or active participation of a caregiver or facilitator, including parent/guardian, nurse, and/or childcare worker. In certain cases,

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involving adolescents with behavioral or mental health issues a facilitator would not remain in the room for part of or for the entire duration of the visit. Nonetheless, the practitioner **shall** obtain consent from the parent or legal representative of the child as required by law in the respective jurisdiction. If the parent/guardian is not present at the time of the visit, a process **shall** be established for prompt communication of the results of the visit with the parent/guardian. The form and content of the clinical encounter rests essentially with the application of the core competences, experience, and skills of the Pediatrician as the materials and methods for virtual clinical encounters among the pediatric / adolescent age cohorts are essentially manifested by complex culture bound behavior patterns.

Geriatric

Here again, the literature contains examples of clinically effective geriatric telemedicine programs. The evidence indicates frequent monitoring for chronic diseases tends to reduce the need for office visits, transportation, as well as reduce stress and increase access to care for homebound patients. Providers also report benefits from the ability to observe the patient in their home environment.

In designing a system for virtual geriatric visits, providers **should** consider the special needs of the elderly, including vision and hearing difficulties and limited physical dexterity or mobility. These **should** be considered when designing and choosing equipment and systems. In cases where a patient demonstrates substantial confusion or anxiety during a telemedicine encounter, the practitioner **should** exercise judgment concerning the continuation or termination of the visit. The presence of facilitators family members/caregivers, and nurses would facilitate the process and ultimate decision making. However, providers **should** have the patient affirm consent to that person's participation in the visit. A practitioner should obtain the patient's consent regarding the presence/participation of facilitators. In cases of questionable mental competency, practitioners **should** ensure appropriate consent from a legal proxy or representative. In circumstances where the patient is in a care facility or senior living community, a trained technician **may** assist in collecting relevant clinical information, including medical records, lab or diagnostic testing, and access to caregivers and staff.

In managing patients with dementia, providers should ask for the patient's durable power of attorney for healthcare decisions and use that as the legal guardian.

Locus of Care

The literature contains examples of clinical effectiveness of successful telemedicine programs in a variety of settings including patient homes, childcare centers, schools, chronic care facilities, hotels, guest houses, the workplace, and prisons. All legal and regulatory requirements and ethical considerations **shall** be used in these settings.

TECHNICAL GUIDELINES

I. Security and Privacy

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Providers and healthcare organizations **shall** comply with privacy and confidentiality requirements stipulated by HIPAA and other applicable laws. They should also familiarize themselves with security arrangements for their systems and their limitations.

This **shall** include appropriate disclosure to patients about sharing their personal healthcare information (PHI). Providers **shall** document medical records as thoroughly as if the patient participated in an in-person visit. Storage of medical records **shall** be accomplished using methods that are compliant with all laws pertaining to medical record storage. Access to patient information **shall** follow standard HIPAA privacy provisions. If an intermediary or third-party entity is engaged for the collection, storage, transmission or processing of PHI, a Business Associate Agreement (BAA) should be executed as stipulated under HIPAA.

Patients **shall** consent prior to any recording of the encounter, and such recording be available for the patients upon request. Release of such recordings data **shall** require written patient authorization or court order in a legal proceeding.

Access to the recordings **shall** only be granted to authorized users and **should** be protected from accidental or unauthorized file sharing and/or transfer.

Data security **shall** be assured by prevailing encryption methods, including FIPS 140-2, known as the Federal Information Processing Standard. Providers **should** familiarize themselves with the technologies available regarding computer and mobile device security and **should** share such information with their patients as appropriate. Special attention **should** be placed on the privacy of information being communicated via mobile devices.

Mobile devices used for clinical purposes **shall** require authentication for access to them, as well as timeout thresholds and protections when lost or misplaced. Mobile devices **should** be kept in the possession of the provider when traveling or in an uncontrolled environment. Unauthorized persons **shall not** be allowed access to sensitive information stored on the device or use the device to access sensitive applications or network resources. Providers **should** have the capability to remotely disable or wipe their mobile device in the event it is lost or stolen. Videoconference software **shall not** allow multiple concurrent sessions to be opened by a single user. Should a second session be attempted, the system **shall** either log off the first session or block the second session. Session logs stored in 3rd party locations (i.e., not on providers' or patients' access device) **shall** be secure and access to these logs **shall** only be granted to authorized users.

Protected health information and other confidential data **shall** only be backed up to or stored in secure data storage locations. Cloud services unable to achieve HIPAA compliance **shall not** be used for PHI or confidential data.

II. Communication between Organizations

Providers of telemedicine **shall** meet the same standards for communication between patient and provider, and between provider and other organizations, as those for in-person encounters.

III. Remote Monitoring Devices and Data

Numerous studies in the US and elsewhere have confirmed the reliability and effectiveness of remote monitoring. This evidence reveals the benefits of remote

monitoring in reducing hospitalization/re-hospitalization, greater patient compliance with medication management, timely diagnosis, and initiation of treatment, and improve health outcomes.

The provider **should** be aware of data trends or current evidence in remote monitoring to the extent possible. Data gathered from remote monitoring **should** be incorporated into the visit record.

When using a personal computer (including laptops, iPads, and other mobile devices), both the provider and patient devices should, when feasible, use professional grade or high-quality cameras and audio equipment. Devices **shall** have up-to-date antivirus software and if feasible a personal firewall installed (at least on the provider's device). Providers should ensure their personal computer or mobile device has the latest security patches and updates applied to the operating system and any 3rd party applications.

A. Provider Organizations

Provider organizations **should** provide adequate resources for hardware, software, and network management, including installation, maintenance, troubleshooting and replacement, as well as effective security arrangements. Special attention **shall** be paid to verify the secure and reliable networks, including successful information exchange.

B. Connectivity

Connectivity **shall** have adequate bandwidth, resolution, and speed for clinical consultations. Bandwidth **shall** be set at a minimum bandwidth of 384 Kbps in both the downlink and uplink directions. Resolution **shall** be set a minimum of 640X360, and speed at 30frames per second. Where practical, providers **may** recommend preferred video conferencing software and/or video and audio hardware to the patient. The provider and/or patient **may** use link test tools (e.g., bandwidth test) to pre-test the connection before starting their session. Each party **should** use the most reliable connection method to access the Internet, including wired (e.g., Ethernet) connections when available. The videoconferencing software **should** be able to adapt to changing bandwidth environments without losing/dropping the connection.

In the event of a technology breakdown, causing a disruption of the session, the professional **shall** have a backup plan in place. The plan **shall** be communicated to the patient prior to commencement of the encounter, and it **should** be included in the general emergency management protocol.

The plan **should** include calling the patient via telephone and attempting to troubleshoot the issue together. It **may** also include referring the patient to another provider or completing the encounter by voice only.

Professionals and patients **may** opt to use cameras that pan, tilt, and zoom for maximal flexibility in viewing.

Doctor on Call's telemedicine platform does **NOT** require downloads or the use of apps, it is based on the ubiquitous access to the providers' web portals using a web browser;

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Chrome for Android and **Safari for Mac (IOS)**

ADMINISTRATIVE GUIDELINES

I. Verification of Service Eligibility

Prior to any telemedicine encounter, the provider or staff **shall** determine the appropriateness of telemedicine for the specific encounter, and gather information on medical history, presenting symptoms/problems, reimbursement method, and usual provider.

II. Provider and Patient Identity Verification

The provider **shall** introduce him/herself and any attendant personnel (e.g., residents, fellows, students) to the patient and document those present. The patient **should announce** those in attendance at his/her end (e.g., guardian, family). This information **shall** become part of the encounter document.

The full name and credentials of the provider and the full name of the patient **shall** be verified by birthdate, address, and insurance status.

III. Provider and Patient Location Documentation

The provider **shall** document the location of the patient and the communication tools. The locations of the provider and patient **may** require documentation for reimbursement and licensing purposes.

Most states require that licensure requirements be based on the location of the patient when service is rendered. Therefore, providers **shall** be aware of the state where the patient is located at the time of service to assure, they are licensed in that state.

Emergency management protocols are entirely dependent on where the patient receives services.

IV. Contact Information Verification for Provider and Patient

Contact information **shall** be obtained from the patient including address of usual residence, address at time of consultation, telephone, mail, and email addresses. Similarly, provider contact information **shall** be exchanged with patient including telephone, practice address and email. It is not necessary for the health provider to reveal their specific location to the patient, especially if the provider is located at home at the time of service.

V. Credentialing and Licensing

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All providers **shall** abide by the same local and regional credentialing policies as required for a traditional in-person visit as mandated by state and federal law.

Providers **shall** abide by all qualifications of licensure, board eligibility, or certification as required for traditional in-person visits according to by state and federal laws. The scope of care provided **shall** be consistent with the provider's level of training (e.g., MD, DO, AMP). Providers **should** be cognizant of oversight requirements and auditing standards that **may** be applied to telemedicine patient visits as if the patient visit occurred in person. Where telemedicine/ telehealth laws require or permit different credentialing, compliance **shall** be maintained with those provisions.

VI. Organizational Policies and Procedures

Healthcare organizations **should** develop and implement organizational policies and procedures governing the use of telemedicine. Providers **shall** adhere to all applicable laws and regional and local practice as to Patient Informed Consents and Disclaimers. As part of organizational policies and procedures, healthcare entities **should** promulgate standards for patient and provider verification and authentication.

Essential List of International Standards complied with by Doctor on Call Telemedicine Platform

NECESSARY CATEGORIES OF STANDARDS REQUIRED FOR TELEHEALTH INFORMATION MANAGEMENT

Identifiers	Codes & Terminology	Content & Formats	Messaging	Security & Access Control
Patient Id	Disease Codes	Patient Enrollment – Registration	HL7,	Authentication
Provider Id	Procedure Codes	Patient Medical Records	Client based / Web based (Universal access EHR)	Access Control
Payer Id	Observation Codes	Billing Formats	X12's formats of data elements, used in Billing & Insurance Claims	Non Repudiation
Health Plan Id	Drug Codes	Minimum Data Sets	HIPAA (Health Insurance Portability & Accountability Act)	Privacy Protection
Pharmacy Id	Nursing Codes	Lab Formats		Non obtrusive inputs Non Repudiation

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VII. Coding and Documentation

Coding and medical record documentation **should** be accurate in reflecting the content of the medical visit rather than enhancing reimbursement.

Medical record and procedure coding **should** follow prevailing coding practices based on state and national guides such as the AMA Coding Requirements.

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Electronic Medical Record

Providers **shall** generate and maintain an electronic medical record (when feasible) for each patient for whom they provide remote care. All communications with the patient (verbal, audiovisual or written) **should** be documented in patient's unique medical record on par with documentation standards of in-person visits.

Access to Analytics and Clinical Information at Point of Care

The provider should ensure that the patient's clinical record is available during or prior to a visit whenever possible, and that sufficient time is allotted to update the patient history; if possible, with the patient's primary care provider or other relevant healthcare entity.

Payment and Billing

Prior to providing patient services, the patient **shall** be made aware of the patient's cost of the service to be provided, if any. **Arrangement for payment should be completed prior to the delivery of the service.** Special consideration must be made for designated Government funded patients participating in telemedicine care. Providers **shall** follow procedure for billing patients outside of standard Insurance reimbursement.