
# Telehealth Implementation Guideline

# Practical tips

## FORWARD

Global pandemic of COVID-19 has impacted the healthcare delivery in different ways threatening and causing a significant backslides of achievements in the health system. In the context of Ethiopia, there are two major contributing factors for backslide of essential health services. One of these contributing factors are reduction of health seeking behaviour due to movement restriction, fear of possible COVID-19 infection in health facilities and reduction of awareness creation and health education campaigns for non COVID-19 conditions. The other factor is panic of health professionals which led to absenteeism, service denial by the health facilities and closing of the essential health services.

To tackle these threatening challenges, the practice of using innovative and new approaches is the way out. Accordingly, with use of digital technologies to deliver medical care, health education, and public health services by connecting multiple users in separate locations, telehealth has significant benefit on narrowing these gaps.

Telehealth service could help address essential health service such as chronic care, while limiting community spread of the virus by minimizing exposure to other patients and staff members. To guide such a practice this telehealth implementation guide is developed to facilitate the utilization of available communication technologies by health facilities for the provision of routine health care services to clients from their location minimizing clients visit to health facilities.

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H. E. Dr Dereje Duguma
State Minister of Health,Ethiopia

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| No. | Name | Institute |
|---|---|---|
| 1. | Hailu Tamiru Dhufera (MD, MPH) | MOH, CHAI |
| 2. | Woldesenbet Waganew (MD, ECCM) | SPHMMC |
| 3. | Aklilu Azazh(Prof.ECCM) | AAU/CHS |
| 4. | Aschalew Worku(MD, PCCM) | AAU/CHS |
| 5. | Berhane Redae(MD, Surgeon) | MOH, Jhpiego Ethiopia |
| 6. | Hilina Taddese (MD) | MOH, MSDG |
| 7. | Menbeu Sultan(MD, Intensivist) | SPHMMC |
| 8. | Miraf Walelegn (MPH) | MOH |
| 9. | Muluwork Tefera(MD, Pediatric ECCM) | AAU/CHS |
| 10. | Natnael Brhanu (MD, MPH) | Save the Children |
| 11. | Getachew Asfaw (MPharm) | MOH |
| 12. | Rahel Argaw (MD, Pediatric PCCM) | AAU/CHS |
| 13. | SisayTeklu (MD, Gyn-Obstetrician ) | AAU/CHS |
| 14. | SisayYifru (MD, Pediatrician ) | MOH |
| 15. | Yakob Seman (MPH) | MOH, MSDG |

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# Table of CONTENTS

# 1. INTRODUCTION

## 1.1 BACKGROUND

As a result of the ongoing public health emergency related to the outbreak of coronavirus (COVID-19), there is an urgency to expand the use of technologies to help people who need routine care and keep vulnerable beneficiaries with mild to moderate symptoms in their homes while maintaining access to the care they need. Limiting community spread of the virus as well as limiting the exposure to other patients and health care workers within the health facilities will slow the spread of the virus. The use of telehealth will reduce unnecessary contact and exposure to individuals who might have been infected with COVID-19.Therefore, health care providers are encouraged to provide medical and mental health services via telehealth and the Ministry of Health of Ethiopia strongly encourages providers to use telehealth to the greatest extent possible following this generic guidance.

In this regard telehealth has significant benefit on addressing patient in need while maintaining /physical distancing in a way that help to slow progress of this pandemic. Other than these benefits telehealth has others benefits.

Benefits of Telehealth

- Reduces travel burden;
- Provides access to a wider range of specialist advice and services;
- Can deliver faster, more efficient health care by using technology to remove the distance and time management barriers;
- Can be used for general health promotion including continuing professional education that would otherwise be missed by professionals in distant locations;
- Improve staff recruitment and retention in remote locations by reducing professional isolation, improving access to continuing professional development, and providing easier access to support

## 1.2 SCOPE

This telehealth implementation guideline is developed to provide guidance for the provision of telehealth care services to all public institutions including hospitals, health centers, clinics and health posts. This guideline is specifically developed for the provision of telehealth services to clients without the need for the clients to visit health facilities amid COVID-19 Pandemic.

Telehealth includes all channels of communication with the patient that leverage Information technology platforms, including Voice, Audio, and Text & Digital Data exchange.

This guideline doesn't address use of digital technology to conduct surgical or invasive procedures remotely.

This guideline may be revised by the Ministry of Health (MOH) after the end of the Pandemic and be used to provide selected telemedicine services.

## 1.3 PURPOSE

The purpose of this Telehealth Implementation Guide is to facilitate the utilization of available communication technologies by health facilities for the provision of routine health care services to clients by minimizing clients' visit to health facilities. This will help to prevent the spread of COVID- 19 in health facility setting. This in turn will contribute to avert COVID-19 infections to health care providers, patients and the community at large. Furthermore, the experience we harness from providing telehealth services amid the COVID-19 Pandemic will help health facilities to make cost effective telehealth services available in the long-term.

The guideline is intended:

- To ensure continuity of care for chronic care patients
- To be used in conjunction with all applicable organizational standards, protocols, and policies and procedures for care service provision.
- To guide clinical practitioners providing assessment, treatment, and consultative services via telecommunications and digital communication technologies
- Assist the clinicians in pursuing a sound course of action to provide effective and safe medical care founded on current information, available resources, and patient needs to ensure patient and provider safety.

- To minimize clients' movement and cross-contamination
- To create linkage between prior and current treating facilities
- Assist intra-and enter-facility interactions among health care workers and discuss their cases as learning forum

## 1.4 DEFINITIONS

**Telehealth** is the use of digital technologies to deliver medical care, health education, and public health services by connecting multiple users in separate locations.

"*The delivery and facilitation of health and health-related services including medical care, provider and patient education, health information services, and self-care via telecommunications and digital communication technologies."* NEJM Catalyst

**Telehealth encompasses** a broad definition of technology-enabled health care services **and involves** A broad range of telecommunications, health information, videoconferencing, and digital image technologies

**Telehealth** includes telemedicine (diagnosis and treatment of illness or injury – see detailed description below) and services such as assessment monitoring, communications, prevention and education.

*Telemedicine: "The delivery of health-care services, where distance is a critical factor, by all health-care professionals using information and communications technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and the continuing education of health-care workers, with the aim of advancing the health of individuals and communities."* WHO

In general, telemedicine is used to denote clinical service delivered by a licensed medical practitioner while telehealth is a broader term of use of technology for health and health related services including telemedicine.

# 2. PRE-REQUISITES AND CONSIDERATIONS

## 2.1 DUTY OF CARE PROVIDER

The duty of care for telehealth should follow the same principles as face-to-face care. For example:

- The responsible provider should give the client adequate, current, and ongoing care instructions
- If face-to-face appointments require the use of interpreters, the presence of family members or a care provider, or other aides, those same supports should be arranged for telehealth appointments
- Consults to local providers: If second opinions or advice is being given by a consultant, the local clinician is ultimately responsible for the care they provide to the client
- If there is any doubt about roles and responsibilities, the consultant and local provider must reach an agreement before a telehealth consultation is provided

## 2.2 PREREQUISITE FOR TELEHEALTH

The following need to be considered when undertaking a telehealth program:

- The ability to communicate under a variety of conditions.
- Have an understanding of the scope of service being provided via Telehealth;
- Well versed IT professionals' presence
- A short orientation to the technology, navigation, and telehealth environment
- Operational protocols and procedures such as scheduling, reserving rooms, timeliness
- Professional telemedicine guidelines and functional internet
- Trained clinical teams on the use of equipment and other technicalities.

## 2.3 LEGAL CONSIDERATION WITH TELEHEALTH

1. License: As the existing medical practice license requires direct patient- doctor contact, the practice should be extended to cover Telehealth services.
2. Consent: when a patient visits a doctor, the physical presence of the patient in the doctor's office is an implied contract and consent given by the patient and accepted by

the doctor. When a patient calls the doctor for Telehealth service, it can be assumed that there is implied consent, but when a facility calls the patient, the presumed consent should be based on the existing patient-doctor relationship the patient had with that institution prior to introduction of Telehealth. So, there has to be an existing or prior direct patient -doctor relationship for the patient to use Telehealth services.

3. Privacy and Confidentiality: fully encrypted data transfer, secured network, avoiding unauthorized disclosure and data breach. Legal frameworks should address these issues.
4. Telehealth should include Tele diagnostic services to back up clinical diagnosis. Therefore, Telehealth always requires Two-way communication. Patient communicates with the doctor and vice versa.
5. Patient doctor relationships: there has to be prior direct contact and the services covered under Telehealth should be clearly defined.
6. Medico-legal issues (malpractice): If Telemedicine gets legal back up, medico-legal issues during Telemedicine practice should get included and addressed.
7. Fraudulent act and abuse of Telehealth: mechanisms to control or avoid false report of undelivered service while Telehealth services are given should be in place
8. Data storage: there has to be standardized way of saving and storing data of the patient for evidence purposes and for to monitor patients progress during subsequent follow up.

## 2.4 ETHICAL CONSIDERATIONS FOR TELEHEALTH

The principles of medical ethics that are mandatory for the profession must also be respected in the practice of telehealth. Face-to-face consultation between physician and patient remains the gold standard of clinical care.

**Telehealth consultation** is a main ethical challenge in telemedicine due to the fact that:

- Licensed Practitioners are required to be highly competent in-service provision.
- Licensed Practitioners are supposed to recognize the value of virtual communications.
- Computer systems are yet unsafe even if they are supposedly privileged with high security.
- Telemedicine is growing rapidly with new relevant standards

# 3. PRINCIPLES OF TELEHEALTH

## 3.1 GENERAL PRINCIPLES OF TELEHEALTH

Licensed Practitioners must adopt or adhere to the following principles when practicing telehealth:

1. The patient-physician relationship should be based on a personal examination and sufficient knowledge of the patient's medical history.
2. The patient-physician relationship must be based on mutual trust and respect.
3. Telehealth should be employed primarily in situations in which a physician cannot be physically present within a safe and acceptable time period.
4. It is primarily used in management of chronic conditions or follow-up after initial treatment where it has been proven to be safe and effective.
5. The physician and patient should be able to identify each other reliably when telemedicine is employed.
6. In case of consultation between two or more professionals, **the primary physician** remains responsible for the care and coordination of the patient with the distant medical team.
7. The physician must aim to ensure that patient confidentiality, privacy and data integrity are not compromised.
8. Data obtained during a telemedicine consultation must be secured to prevent unauthorized access and breaches of patient confidentiality
9. Electronic transmission of information must also be safeguarded against unauthorized access.
10. Proper informed consent requires that all necessary information regarding the distinctive features of telemedicine visit be explained fully to patients
11. Physicians must be aware that certain telehealth technologies could be unaffordable to patients and hence could impede access.
12. Equitable access to telehealth to reach all who need tele consulting
13. Licensed Practitioners should not to participate in telehealth if they violate the legal or ethical framework of the country.
14. Licensed Practitioners need to inform patients about availability and recommend services such as emergency when inaccessible.

15. Licensed Practitioners should exercise their professional autonomy in deciding whether a telemedicine versus face-to-face consultation is appropriate.

## 3.2 Responsibilities of the Licensed Practitioners

1- A physician whose advice is sought through the use of telehealth should keep a detailed record of the advice he/she delivers as well as the information he/she received and on which the advice was based in order to ensure traceability.
2- If a decision is made to use telehealth, it is necessary to ensure that the users (patients and healthcare professionals) are able to use the necessary telecommunication system.
3- Licensed Practitioners must seek to ensure that the patient has understood the advice and treatment suggestions given and take steps in so far as possible to promote continuity of care**.**
4- Licensed Practitioners should be aware of and respect the special difficulties and uncertainties that may arise when he/she is in contact with the patient through means of telecommunication.
5- Licensed Practitioners must be prepared to recommend direct patient-doctor contact when he/she believes it is in the patients' best interests.
6- Licensed Practitioners should only practice telehealth where they are licensed to practice.
7- Telehealth service providers should provide materials such as telehealth posters and brochures to clients as needed.

## 3.3 Quality of Care

- Healthcare quality assessment measures must be used regularly to ensure patient security and the best possible diagnostic and treatment practices during telehealth procedures.
- The delivery of telehealth services must follow evidence-based practice guidelines to the degree they are available, to ensure patient safety, quality of care and positive health outcomes.
- Like all health care interventions, telehealth must be tested for its effectiveness, efficiency, safety, feasibility and cost-effectiveness.

- If it is necessary to use telehealth in an emergency situation, the advice and treatment suggestions are influenced by the severity of the patient´s medical condition and the competency of the persons who are with the patient.
- Entities that deliver telehealth services must establish protocols for referrals for emergency services.

## 3.4 Client Suitability Guidelines

Clinical departments/programs should identify inclusion and exclusion criteria for perspective telehealth clients. The following list includes some factors that can influence suitability:

- Level of physical assessment required
- Availability of support in the locality or vicinity of the patient
- Ability of the client to participate in conversation such as physical, mental, and cognitive barriers
- Distance between provider and clients' residences
- Dependency on local availability of associated imaging and lab tests
- Client desire to participate in a telehealth consultation
- Timetable or schedule which needs to be discussed with client for its suitability
- Ability to schedule telehealth session within the time frames of a service or program's standard of practice guidelines

## 3.5 Informed Consent

The clinical program is responsible for explaining what to expect, privacy and confidentiality measures in place, and the client's right to refuse care via telehealth.

- Documentation in the client record must reflect client notification and agreement to the service.
- Clients must be informed that access to a face-to-face consultation is never denied if they opt out of or don't wish to receive care via telehealth.

**Written consent** is only required by the provider when:

- If written consent is normally required for face-to-face sessions

- Clients are asked to release requisite personal information from one organization to another
- Clients are asked to participate in research projects while in care, or
- Recording a Telehealth session is required for administrative and program monitoring purpose.

# 4. DOCUMENTATION AND CLIENT RECORDS

## 4.1 CLIENT INFORMATION REQUIRED BY CLINICAL TELEHEALTH PROGRAM AT PROVIDER SITE

- The information required is determined by the respective clinical Telehealth Program. Generally, it is expected to be the same as what's required for a face-to-face appointment and provided in advance of the Telehealth appointment or session.

### Consultation Report

- A report from the telehealth provider is documented and incorporated into the client record. Documentation timelines for telehealth consults are consistent with existing clinical processes for face-to-face consultations.

### Client Information required by healthcare providers at client site

- Information required by the client site is requested through the provider site and may consist of electronic and paper charts, diagnostic images and lab reports.

### Clinical Telehealth Support Notes

- Clinical documentation by clinical support staff who attend the client should be completed as determined during program development and recorded in the same timely manner face- to-face events are documented.

## 4.2 RESPONSIBILITY FOR RECORDS

- The original client record is held with the Provider. Copies of the Telehealth consult report or note are shared with the referring physician or clinician as they would be for face-to-face consultations.

# 5. PATIENT MANAGEMENT

If the condition can be appropriately managed via telehealth, based on the type of consultation, then the licensed medical practitioner may proceed with a professional judgment to:

- Provide Health Education as appropriate to the case; and/or
- Provide Counseling related to specific clinical condition; and/or
- Prescribe Medicines

### 5.1 Health Education

A licensed medical practitioner may impart health promotion and disease prevention messages. These could be related to diet, physical activity, and cessation of smoking, contagious infections and so on. Likewise, he/ she may give advice on immunizations, exercises, hygiene practices, mosquito control etc

Pharmacists shall provide advice on medication related information like side effects, drug interactions (Drug-Drug, Drug-Food, Drug-herbal and Drug-beverage), adverse drug reaction, compliance and adherence of medicines and non-pharmacologic approaches (lifestyle modifications and disease prevention).

### 5.2 Counseling

This is specific advice given to patients and it may, for instance, include food restrictions, do's and don'ts for a patient on specific drugs, proper use of a hearing aid, home physiotherapy…etc to mitigate the underlying condition. This may also include advice for new investigations that need to be carried out before the next consult.

### 5.3 PRESCRIBING MEDICINES

Prescribing medications, via telemedicine consultation is at the professional discretion of the licensed medical practitioner.

It entails the same professional accountability as in the traditional in-person consult.

If a medical condition requires a particular protocol to diagnose and prescribe as in a case of in-person consult, then same prevailing principle will be applicable to a telemedicine consult.

A licensed medical practitioner may prescribe medicines via telehealth ONLY when he/she is satisfied that he/ she has gathered adequate and relevant information about the patient's medical condition and prescribed medicines are in the best interest of the patient.

NB: Prescribing Medicines without an appropriate diagnosis/provisional diagnosis will amount to a professional misconduct.

## 5.4 SPECIFIC RESTRICTIONS

- There are certain restrictions on prescribing medicines on consult via telehealth depending upon the type of consultation and mode of consultation.
- The categories of medicines that can be prescribed via tele-consultation will be further updates and notified accordingly
- The categories of medicines that can be prescribed are listed below:

**Category 1**: This comprises those medicines which are safe to be prescribed through any mode of tele-consultation.

- These are medications which are listed as The Over the Counter Medicine list for Ethiopian 2nd Edition( See Annex-1 : over the counter medicines list for Ethiopia, website on.www.efda.org.et

**Category 2:** These medications are those which can be prescribed during consult are being re-prescribed for re-fill, in case of follow-up.

- The medicines which are considered in these categories are those medications which have been used by the patient and stable on it and refill it!
- The Medicines which included in this category could be different classes based on the patient cases scenario.
- They are safe and have no potential for abuse and addiction.
- The refill could be only for maximum of twice (2x refill).
- Medicines which are not included in this category are antimicrobials which could be prescribed for acute cases.

**Category 3:** These are medications which are needed to optimize the patient outcome and are safe and effective to use during follow up consultation.

- These medications are those which used as an add-on therapy.
- The list of medicines in this category could be different classes based on the patient case scenario.
- They are safe and have no potential for abuse and addiction.
- Medicines which are not included in this category are : Anti-cancer medicines, narrow therapeutic index medication ( Eg; Digoxin , ) and High Alert medications

**Category 4/Prohibited List:** A licensed medical practitioner providing consultation via telehealth **cannot prescribe** medicines in this list.

- These medicines have a high potential of abuse, addiction and could harm the patient or the society at large if used improperly
- The list of medicines included in this category are listed on national list of Psychotropic substance and Narcotic Drugs of Ethiopia , 2017.
- See Annex-2 : National List of Psychotropic Substances and Narcotic drugs

## 5.5 PRESCRIPTION PROCESS

1. Direct Method

- Licensed Medical Practitioner shall provide photo, scan, and digital copy of a signed prescription or e-Prescription to the patient via email, MMS(multimedia message) or any messaging platform then the patient might bring it into pharmacy.
- Licensed Medical practitioners → Patient → Pharmacy → Patient

2. Indirect method

- Licensed Medical Practitioner send the prescription (Photo, Scan, MMS, digital copy of signed prescription or e-prescription) directly to a pharmacy then the patient will get a medicine from any pharmacy of his choice.
- In this case, the patient consent must be guaranteed.
- Licensed Medical Practitioners → Pharmacy →Patient

# 6. FRAMEWORK FOR TELEHEALTH

This section lays out the framework for practicing telemedicine in 5 scenarios:

- Patient to licensed medical practitioner
- Caregiver to licensed medical practitioner
- Health Worker to licensed medical practitioner
- licensed medical practitioner to licensed medical practitioner
- Emergency Situations

***Essential Principles*:**

- The ***professional judgment*** of a licensed medical practitioner should be the guiding principle: a licensed medical practitioner is well positioned to decide whether a technology-based consultation is sufficient, or an in-person review is needed. Practitioner shall exercise proper discretion and not compromise on the quality of care
- ***Same principles apply irrespective of the mode*** (video, audio, text) used for a telemedicine consultation. However, the patient management and treatment can be different depending on the mode of communication used.
- Licensed medical practitioner should exercise **his/her professional discretion** for the mode of communication depending on the type of medical condition. If a case requires a video consultation for examination, licensed medical practitioner should explicitly ask for it
- The licensed medical practitioner ***can choose not to proceed*** with the consultation at any time. At any step, the licensed medical practitioner may refer or request for an in-person consultation
- At any stage, the ***patient has the right to choose to discontinue*** the teleconsultation

## 6. 1 CONSULTATION BETWEEN PATIENT AND LICENSED MEDICAL PRACTITIONER

Specifically, this section details with the key elements of the process of teleconsultation to be used in the first consults and follow up consults when a patient consults with a licensed medical practitioner.

*In these 2 situations, the patient initiates telemedicine consultation and thereby consent is implied*

### 6.1.1 Follow-up Consult: Patient to licensed medical practitioner

In a follow-up consultation, since the licensed medical practitioner - patient interaction has already taken place for the specific medical condition under follow-up; there is already an understanding of the context, with availability of previous records. This allows a more definitive and secures interaction between the licensed medical practitioner and the patient.

**Follow-Up Consult means**

The patient is consulting with the licensed medical practitioner within 6 months of his/her previous in-person consultation, and this consultation is for continuation of care of the same health condition. Follow-up can be in situations of a chronic disease or a treatment (e.g. renewal or change in medications) when a face-to-face consultation is not necessary. Examples of such chronic diseases are asthma, diabetes, hypertension and epilepsy etc

### 6.1.2 Tele-Consultation Process for Follow-up consults

The flow of the process steps is detailed below:

1. ***Start of a Telehealth Consultation for Follow Up***

- Patient may initiate a follow up consult with responsible mid-level professionals which may be applicable in tertiary hospitals and or
- Patient may initiate a follow up consult with a licensed medical practitioner with whom prior face-to-face treatment is initiated for continuation of his/her ongoing treatment or for a new complaint or complication arising during the course of the ongoing treatment using any mode of communication. For e.g., the patient may do an audio or video call

with a licensed medical practitioner or send him/her an email or text message with a specific health query

- Licensed medical practitioner accepts or undertake the consultation

2. ***Patient identification and consent***

- Licensed medical practitioner should be reasonably convinced that he/she is communicating with the known patient, for e.g. if the patient is communicating with licensed medical practitioner through the registered phone number or registered email id
- If there is any doubt, licensed medical practitioner can request the patient to reinitiate the conversation from a registered phone number or email id or should confirm patient identity to his/her satisfaction by asking patient's name, age, address, email ID or phone number.

Patient initiates the Telehealth consultation and thereby consent is implied

3. ***Quick Assessment for Emergency Condition***

If the patient presents with a complaint which the licensed medical practitioner identifies as an emergency condition necessitating urgent care, the licensed medical practitioner would then advice for first aid to provide immediate relief and guide for referral of the patient, as deemed necessary.

4. ***In case of routine follow-up consultation, the following would be undertaken:***

If the licensed medical practitioner has access to previous records of the patient, he/ she may proceed with continuation of care.

licensed medical practitioner shall apply his/her professional discretion for type of consultation based on the adequacy of patient information (history/examination findings/investigation reports/past records).

If the licensed medical practitioner needs additional information, he/ she should seek the information before proceeding and resume tele-consultation for later point in time.

### *5. Patient management*

If licensed medical practitioner is satisfied that he/she has access to adequate patient information and if the condition can be appropriately managed by tele-consultation, he/she would go ahead with the tele-management of the patient.

If the follow-up is for continuation of care, then the licensed medical practitioner may take a professional judgment to either:

- Provide health education as appropriate in the case; or
- Provide counseling related to specific clinical condition *including advice related to new investigations that need to be carried out before next consult*;
- And/or Prescribe Medications. The medications could be either of the below:
    - If the follow up is for *continuation of care for the same medical condition*, the licensed medical practitioner would re-prescribe original set of medications for a refill (category 2 of medications, which has been previously prescribed for the patient).
    - If the licensed medical practitioner considers addition of a new drug, as an 'add-on' medication to optimize the underlying medical condition, then the licensed medical practitioner can prescribe medications listed under category 3.
    - If the follow-up consult is for a new minor ailment necessitating only 'over the counter' medications or those notified for this purpose, medications under category 1 can be prescribed.
    - If the follow-up consult reveals new symptom pertaining to a different spectrum of disease, then the licensed medical practitioner would proceed with the condition as enunciated in the scenario for a first-time consultation.

**Follow-up Consult: licensed medical practitioner to Patient**

Since licensed medical practitioner initiates the Telehealth consultation, consent is required. Others process shall be similar to the follow-up consult: patient to licensed medical practitioner.

## 6.2 CONSULTATION BETWEEN PATIENT AND LICENSED MEDICAL PRACTITIONER THROUGH A CAREGIVER

For the purpose of these guidelines "***Caregiver***" could be a family member, or any person authorized by the patient to represent the patient.

There could be two possible settings:

1. Patient **is present** with the **Caregiver** during the consultation.
2. Patient **is not present** with the **Caregiver**. This may be the case in the following situations:

   2a. Patient is a minor (aged 18 or less) or the patient is incapacitated, for example, in medical conditions like dementia or physical disability etc. The care giver is deemed to be authorized to consult on behalf of the patient.

   2b. **Caregiver** has a formal authorization or a verified document establishing his relationship with the patient and/or has been verified by the patient in a previous in-person consult (explicit consult).

In all of the above, the consult shall proceed as in the case of licensed medical practitioner and the patient (first or follow up consult) mentioned above.

## 6.3 CONSULTATION BETWEEN HEALTH WORKER AND LICENSED MEDICAL PRACTITIONER

For the purpose of these guidelines, "Health worker" could be a Nurse, Mid- Level Health Practitioner, or any other health worker designated by an appropriate authority

**Proposed Set up**

- This sub-section will cover interaction between a Health Worker seeking consultation for a patient in a public health facility.
- In a public health facility, the mid-level health practitioner at primary hospitals and Health center can initiate and coordinate the Tele-health consultation for the patient with a licensed medical practitioner at a higher center at district or regional or national level.
- This setting will also include health posts, home visits, mobile medical units or any community-based interaction.

**Tele-Consultation Process**

The flow of the process is detailed below:

***1. Start of a Telehealth Consultation through a Health Worker/licensed medical practitioner***

- The premise of this consultation is that a patient has been seen by the Health Worker
- In the judgment of the health worker, a tele-consultation with a licensed medical practitioner is required
- Health Worker should obtain the patient's informed consent
- Health worker should explain potential use and limitations of a telehealth consultation
- He/she should also confirm patient identity by asking patient's name, age, address, email ID, phone number or any other identification that may be reasonable
- Health Worker initiates and facilitates the telehealth consultation.

***2. Patient Identification (by licensed medical practitioner)***

- Licensed medical practitioner should confirm patient identity to his/her satisfaction by asking patient's name, age, address, email ID, phone number or any other identification that may be reasonable
- Licensed medical practitioner should also make their identity known to the patient
- Licensed Practitioner should confirm the legality of the consulting health care provider in any way

**3.** ***Patient Consent (by licensed medical practitioner)***

- Licensed medical practitioner should confirm the patient's consent to continue the consultation

**4.** ***In case of Emergency***

- The Health Worker would urgently communicate about the underlying medical condition of the patient to the licensed medical practitioner.
- Based on information provided, if the licensed medical practitioner identified it as an emergency condition necessitating urgent care, he/she should advice for first aid to be

provided by the health worker for immediate relief and guide for referral of the patient, as deemed necessary.

In case, the condition is not an emergency, the following steps would be taken:

**5.** ***Exchange of Information for Patient Evaluation (by licensed medical practitioner)***

- The Health Worker must give a detailed explanation of their health problems to the licensed medical practitioner which can be supplemented by additional information by the patient, if required.
- The licensed medical practitioner shall apply his professional discretion for type and extent of patient information (history/examination findings/Investigation reports/past records) required to be able to exercise proper clinical judgment.
- If the licensed medical practitioner feels that the information provided is inadequate, then he/she shall request for additional information. This information may be shared in real time or shared later via email/text, as per the nature of such information. For e.g., licensed medical practitioner may advice some laboratory or/and radiological tests for the patient. For such instances, the consult may be considered paused and can be resumed at the rescheduled time.
- Licensed medical practitioner may provide health education as appropriate at any time.

***6. Patient Management***

- Once the licensed medical practitioner is satisfied that the available *patient information is adequate* and that the case is *appropriate for management via telehealth, then he/she would proceed with the management*. Health worker should document the same in his/her records.
- The licensed medical practitioner may take a professional judgment to either:
    - Provide health education as appropriate in the case,
    - Provide counseling related to specific clinical condition *including advice related to new investigations that need to be carried out before next consult*;
    - And/or prescribe medications.

*As prescribed for use in guidelines from time to time for a particular cadre of Health Workers.

## 6.4 CONSULTATION BETWEEN LICENSED MEDICAL PRACTITIONER AND ANOTHER LICENSED MEDICAL PRACTITIONER

It is acknowledged that many medical specialties like radiology, pathology, ophthalmology, cardiology, dermatology etc. might be at advanced stages of adoption of technology for exchange of information or some may be at early stage. Guidelines support and encourage interaction between Licensed Medical Practitioners/ specialists using information technology for diagnosis, management and prevention of disease.

- Licensed Medical Practitioner might use telehealth services to consult with another licensed Medical Practitioner or a specialist for a patient under his/her care. Such consultations can be initiated by a licensed Medical Practitioner on his/her professional judgment.
- The Licensed Medical Practitioner asking for another Licensed Medical Practitioner's advice remains the treating Licensed Medical Practitioner and shall be responsible for treatment and other recommendations given to the patient.

***Tele-radiology*** is the ability to send radiographic images (x-rays, CT, MRI, PET/CT, SPECT/CT, MG, Ultrasound) from one location to another.

***Tele-pathology*** is use of technology to transfer image-rich pathology data between distant locations for the purposes of diagnosis, education, and research.

***Tele-ophthalmology -*** *A*ccess to eye specialists for patients in remote areas, ophthalmic disease screening, diagnosis and monitoring.

## 6.5 EMERGENCY SITUATION

In all telehealth consultations, as per the judgment of the licensed medical practitioner, if it is an emergency situation, the goal and objective should be to provide in-person care at the soonest possible. However, critical steps could be lifesaving and guidance and counseling could be critical. For example, in cases involving trauma, the right advice and guidance around maintaining the neck position might protect the spine in some cases. The guidelines are designed to provide a balanced approach in such conditions. The licensed medical practitioner, based on his/ her professional discretion may:

- Advise first aid

- Counseling
- Advice referral and further follow-up

In all cases of emergency, the patient MUST be advised for an in-person interaction with a licensed Medical Practitioner.

# 7. ESTABLISHING TELEHEALTH CARE SERVICE

All health facilities intending to provide telemedicine health care services amid COVID-19 pandemic should follow the following steps or process.

## 7.1 ADDRESSING LEGAL CONSIDERATIONS AND REQUIRED APPROVALS

Although telehealth has the potential to improve several aspects of medical care, such as facilitating physician-patient communication and monitoring treatment of chronic conditions, telehealth poses unique challenges in ensuring patient-safety and privacy of health information. Therefore, Telehealth policies and procedures should address the following elements to safeguard the integrity of care: licensure, establishment of the physician-patient relationship, evaluation and treatment, informed consent, continuity of care, referrals for emergency services, medical records, privacy and security of the patient records and exchange information; disclosure and functionality of telehealth services and prescribing.

Health facilities should analyze the status of existing regulations for any intended healthcare service; develop standard operating procedure (SOP) for the provision of telehealth services; and seek licensure/approval from relevant authorities for the provision of telehealth services. The relevant authorities will review the SOP submitted by the health facility requesting approval/licensure and assess the capability of the health facility in providing telemedicine services before giving permission. In light of the COVID-19 Pandemic, the Ministry of Health is expected provide quick approval to health facilities requesting to establish telehealth services.

Service providers must comply with the Ethiopian privacy principles, privacy legislations and regulations. Clear policies, procedures and risk management protocols will help to ensure compliance with privacy and confidentially legislations. This can include the storage of any video recordings and images, the visual and audio privacy of the teleconferencing room and processes for dealing with any data breaches that may occur. So reasonable steps must be taken to ensure security measures are in place for protecting and controlling access to client data for? misuse, interference and less, as well as unauthorizes access, modification or disclosure. This includes how clients' personal information is collected, stored, used, securely backed up and disposes of.

## 7.2 Identifying Telehealth Services and Clients

A health facility intending to establish telehealth services should identify or prioritize healthcare services which can be provided through telehealth given its capacity and resources. A number of health care services can be provided through telehealth. Examples include:

- Non-communicable diseases (NCDs)
- Communicable diseases (e.g. HIV/AIDS and TB)
- Chronic lung diseases
- Mental health
- Dermatology and others

Once the health care services are identified, the health facility can easily identify its clients for the intended telehealth services. Knowing more about who our patients are and what they're looking for from their medical practitioners is important, but it is especially important in a field like telehealth. It is recommended to identify what kind of communication technologies are already being used by clients. This will be very helpful in choosing the technology that the facility will be using to provide the telehealth services.

## 7.3 Choosing the Technology to be Used and Mode of Communications

Multiple technologies can be used to deliver telehealth consultation. There are 3 primary modes: Video, Audio, Image or Text (chat, messaging, email etc.) Each one of these technology systems has their respective strengths, weaknesses and contexts in which they may be appropriate or inadequate to deliver a proper diagnosis and treatment services.

Two different kinds of technology make up most of the telemedicine applications in use today. The first, called store and forward, is used for transferring digital images from one

location to another. A digital image is taken using a digital camera, ('stored') and then sent

('forwarded') to another location. This is typically used for non-emergent situations, when a

diagnosis or consultation may be made in the next 24 - 48 hours and sent back.

The image may be transferred within a building, between two buildings in the same city, or

from one location to another anywhere in the world. Teleradiology, the sending of x-rays, CT scans, or MRIs (store-and-forward images) is the most common application of telemedicine in use today. Telepathology is another common use of this technology. Images of pathology slides may be sent from one location to another for diagnostic consultation. Dermatology is also a natural for store and forward technology, (although practitioners are increasingly using interactive technology for dermatological exams). Digital images may be taken of skin conditions, and sent to a dermatologist for diagnosis.

The other widely used technology, two-way interactive television (IATV), is used when a 'face-to-face' consultation is necessary. It is usually between the patient, their provider and a specialist, but may be any combination of the three. Videoconferencing equipment at both locations allow a 'real-time' consultation to take place. The technology has decreased in price and complexity over the past years, and many programs now use desktop videoconferencing systems. There are many configurations of an interactive consultation, but most typically it is from an urban-to-rural location. It means that the patient does not have to travel to an urban area to see a specialist, and in many cases, provides access to specialty care when none has been available previously. Almost all specialties of medicine have been found to be conducive to this kind of consultation, including psychiatry, internal medicine, rehabilitation, cardiology, pediatrics, obstetrics and gynecology and rehabilitation. There are also many peripheral devices which can be attached to computers which can aid in an interactive examination. For instance, an otoscope allows a physician to 'see' inside a patient's ear; a stethoscope allows the consulting physician to hear the patient's heartbeat.

It is therefore important to understand the strengths, benefits as well as limitations of different technologies. Though telehealth consultation provides safety to the health care provider and patients from COVID-19, it cannot replace physical examination that may require palpation, percussion or auscultation; that requires physical touch and feel (Please see Annex 1 to learn

more about the strengths and limitations of the modes of telehealth delivery). There may be situations where a real-time consultation and investigation may be preferable over an asynchronous exchange of information in order to reach a diagnosis and to understand the context better. Similarly, there would be conditions where health facilities could require hearing the patient speak, therefore, a voice interaction may be preferred than an email or text for a diagnosis. There are also situations where the health care provider needs to visually examine the patient and make a diagnosis. Considering the situation, health professionals may decide the best technology to use to diagnose and treat certain conditions.

It is essential to select the technology that is secure, widely used, accessible, and affordable. Health institutions should adhere to federal and regional privacy and record retention laws. Selecting standardized videoconferencing, store and forward technologies, and electronic medical record systems cannot be overstated. Use of encrypted, password-protected systems and business associate agreements with technology partners such as Ethio-telecom to conform to all the recommended legal and ethical standards is very important. The platform should also have an interface and alignment with the existing health information system.

## 7.4 Design Telehealth Workflow and Develop Standard Operating Procedure (SOP)

The key elements of the process of telehealth service provision to be used in the first and follow up consultations between a health care provider and a patient should be clearly outlined and indicated in the SOP (Sample workflow charts are indicated in Annex 2). It should be noted that telehealth service provision requires the participation of multidisciplinary team of health professionals. There may be a need to combine telehealth with in-person interaction, for example for laboratory tests, imaging, dispensing of medicines etc.

Each health facility has to develop an SOP specific to its setting for telehealth service provision. The following critical issues should be addressed in the SOP.

- Management system and organizational structure for the telemedicine services
- The type of telemedicine services provided by the health facility
- The modes of communication and technologies which are used for the telemedicine service provision
- The process of telemedicine service provision

- Payment schemes
- Type of drugs eligible for e-prescription

## 7.5 CREATE A MONITORING AND EVALUATION PLAN

To track the implementation and effectiveness of this initiative, the presence of sound monitoring and evaluation mechanisms is essential. Given the key principle of the Ethiopian HMIS, as much effort should be placed to integrate with and leverage existing the M&E mechanisms of the health sector. The indicators to be selected should be very simple to understand, feasible to track and robust enough to understand the process and outcome of the effort. M&E mechanism such as record keeping, reporting, review meetings, supervisions, rapid assessment, documentation of best practices and lessons learnt and eventually evaluation of the initiative need to be employed as appropriate and feasible.

### 7.5.1 INDICATORS

Table 1: List of selected indicators to monitor the telehealth initiative.

| NO | **Objectives/Activities** | **Indicator(s)** | **Data source** | **Means of verification/ Method of Data collection** | **Responsible body** | **Reporting frequency** |
|---|---|---|---|---|---|---|
| 1 | Print and distribute the telehealth guideline | Number of health facilities which received the telehealth guideline | Administrative records | Administrative reports<br>Supervisions<br>Rapid assessments | Health facilities and health administrative units, MOH | Once/ Startu |
| | | Number of telehealth guidelines printed and distributed | Administrative records | Administrative reports<br>Supervisions<br>Rapid assessments | Health facilities and health administrative units, MOH | Once /Startu |
| 2 | Build the capacity of health care workers on telehealth | Number of health care workers trained on telehealth and the telehealth guideline | Administrative records<br>Training reports | Administrative reports<br>Supervisions<br>Rapid assessments | MOH, health administrative units, partners | Quarterly |
| | | Number of health facilities which have at least one health care worker trained on telehealth and the telehealth guideline | Administrative records<br>Training reports | Administrative reports<br>Supervisions<br>Rapid assessments | health administrative units, health facilities | Quarterly |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | License medical practitioners to provide telehealth services | Number of medical practitioners licensed to provide telehealth services (By type of specialty) | Administrative records | Administrative reports<br><br>Supervisions<br>Rapid assessments | health administrative units, health facilities | Quarterly |
| 4 | Implement telehealth programs | Number of health facilities implementing telehealth program by a licensed medical practitioner (By type of services) | Health facility administrative records<br>SOPs | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Quarterly |
| | | Number of health facilities implementing telehealth program by a licensed medical practitioner (By type of communication mode (Audio, text, image, store and forward, real-time) | Health facility administrative records, SOPs | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Quarterly |
| 5 | Identify clients and provide telehealth service | Number of clients identified for telehealth services (By type health care services) | Medical records | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Quarterly |
| | | Number of clients provided with telehealth services (By type health care services) | Medical records | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Quarterly |
| 6 | Prepare SOPs to guide the process of telehealth service | Number of health facilities which have operationalized SOPs | Administrative records,<br>Endorsed SOP | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Quarterly |
| 7 | Ensure quality of telehealth services | Number of health facilities which have prepared and/or are using protocols for referral for emergency services | Administrative records, | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Quarterly |
| | | Number of facilities which carried out client satisfaction assessments | Administrative records, | Administrative reports<br><br>Supervisions<br>Rapid assessments | Health facilities and health administrative units | Semi-annaul |
| | | Number of health facilities with 'favorable' client satisfaction rating | Administrative records,<br>Client satisfaction assessment reports | Administrative reports<br><br>Supervisions | Health facilities and health administrative units | Semi-annual |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | Rapid assessments | | |

### 7.5.2 MONITORING

In general, the monitoring of the telehealth service shall follow the usual medical service monitoring and follow up within the existing structure from the health facility to up to the Ministry of Health

As stated above, existing record keeping mechanism should be utilized depending on the activities and the indicators to be tracked and reported. Some new record keeping tools to record such as clients identified for telehealth services and interim reporting format until telehealth service tracking becomes part of the standard reporting tool might be prepared as needed. To standardize the process, reporting of the services provided through telehealth based on selected indicators has to be incorporated in the health monitoring system during the next round of HMIS revision. Whichever indicators are tracked and new tools are used, the data should flow based on the standard HMIS data flow channel and should finally make its way to MOH for action.

Health facilities should implement all relevant monitoring mechanisms for continuous quality improvement of the telehealth services. Facilities should monitor the telemedicine service provision depending on their plan and identify and respond to challenges as they arise. Periodic supportive supervision of health care providers will improve the quality of telemedicine service provision.

Telehealth agenda should be integral part of existing review meetings, supervisions and other site visit activities. Equally important is the documentation and sharing of best practices and lessons learnt and challenges faced using the available mechanism of reporting, mass and social media as appropriate.

System for reporting any violations of telemedicine procedures and addressing any requests or grievances from patients such as client satisfaction surveys should also be in place

### 7.5.3 EVALUATION

The evaluation of the effectiveness of the telehealth service initiative during the COVID 19 pandemic should be an integral part of evaluation of the overall health and socio-economic impact of the COVID1-9 and effectiveness of the comprehensive national response to contain the pandemic and mitigate its impacts. Accordingly, in order to ensure the possible attribution

of the telehealth interventions to the national response, proper documentation of all the inputs, processes and results registered is a key undertaking in the evaluation process. Therefore, all actors engaged in the process of service provision, recording and reporting, resource allocation and capacity building should pay adequate emphasis for the proper documentation of records and reports and also should actively engage in the evaluation process that should engage relevant actors.

## 8. REFERENCE


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# 9. ANNEXES

## ANNEX 1: STRENGTHS AND LIMITATIONS OF VARIOUS MODES OF COMMUNICATION IN TELEMEDICINE SERVICES PROVISION

| Mode | Strengths | Limitations |
|---|---|---|
| **Video**: Telemedicine facility, Apps, Video on chat platforms, etc. | • Closest to an in person-consult, real time interaction<br>• Patient identification is easier<br>• Provider can see the patient and discuss with the caregiver<br>• Visual cues can be perceived<br>• Inspection of patient can be carried out | • Is dependent on high quality internet connection at both ends, else will lead to a sub optimal exchange of information<br>• Since there is a possibility of abuse/ misuse, ensuring privacy of patients in video consults is extremely important |
| **Audio**: Phone, Voice over Internet Protocol (VOIP), Apps etc. | • Convenient and fast<br>• Unlimited reach<br>• Suitable for urgent cases<br>• No separate infrastructure required<br>• Privacy ensured<br>• Real-time interaction | • Non-verbal cues may be missed<br>• Not suitable for conditions that require a visual inspection (e.g. skin, eye or tongue examination), or physical touch<br>• Patient identification needs to be clearer, greater chance of imposters representing the real patient |
| **Text based**: Specialized Chat based Telemedicine Smartphone Apps, SMS, Websites, messaging systems e.g. WhatsApp, FB Messenger | • Convenient and quick<br>• Documentation & Identification may be an integral feature of the platform<br>• Suitable for urgent cases, or follow-ups<br>• No separate infrastructure required<br>• Can be real time | • Besides the visual and physical touch, text-based interactions also miss the verbal cues<br>• Difficult to establish rapport with the patient<br>• Cannot be sure of identity of the provider or the patient |

| | | |
|---|---|---|
| Asynchronous: Email, Fax, recordings etc. | • Convenient and easy to document<br>• No specific app or download requirement<br>• Images, data, reports readily shared<br>• No separate infrastructure required<br>• More useful when accompanied with test reports and follow up and second opinion | • Not a real time interaction, so just one-way context is available, relying solely on the articulation by the patient<br>• Patient identification is document based only and difficult to confirm<br>• Non-verbal cues are missed<br>• There may be delays because the doctor may not see the mail immediately |

## ANNEX 2: FLOW CHART FOR FOLLOW UP TELE-CONSULTATION