

## Leveraging Technology to Improve Health Care During the COVID-19 Pandemic and Beyond

### 7 Key Components Needed to Implement Telemedicine



1

#### Get the green light from government

*Address legal and regulatory considerations; secure required approvals*



2

#### Identify telemedicine users

*Are some health care providers and patients already using digital technologies?  
Are others ready to adopt new technologies?*



3

#### Choose the tech platform

*An ideal platform is secure, widely used, accessible, and affordable*



4

#### Align financial incentives

*Establish a feasible business model (e.g., provider reimbursement, insurance coverage)*



5

#### Define workflows

*Ensure that telemedicine adds efficiency and enhances care*



6

#### Train the health worker team

*Engage and train health care workers to empower treatment in the community*



7

#### Engage patients

*Patients like to self-manage their care; ask them to spread the word to family and friends*

## Executive Summary

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- Telemedicine—the delivery of health care services remotely using communication technologies—is a useful strategy to promote physical distancing in response to the COVID-19 pandemic.
- The availability of telemedicine for patients with non-communicable disease (NCDs) is particularly critical during this pandemic, given these patients' vulnerability.
- As countries around the world continue to provide patient care during the COVID-19 pandemic, a strategic framework for successfully implementing telemedicine for NCDs is increasingly necessary.
- In the long-term, telemedicine could increase more equitable access for patients with NCDs to receive timely care in their communities.

### The rationale for expanding telemedicine during this time is two-fold:

#### 1. COVID-19 response

Patients with NCDs should stay at home and avoid hospitals to reduce disease transmission but also need continuous care for their chronic conditions. Direct access to care via telemedicine is crucial.

#### 2. Long-term strategy

Making care available at the community level through telemedicine makes treatment more patient-centered. Telemedicine is not only more convenient and accessible for patients, but also has the potential to reduce costs and volume at busy health centers.

This document provides a general approach for implementing telemedicine for NCDs.

***All methods discussed here should be adapted to meet local legal requirements for telemedicine and receive requisite approvals from relevant government entities in each country or region. This is not an official guidance endorsed or approved by any government entity.***

Telemedicine can be provided directly to patients or via health care workers:

1. **Telemedicine for patients** – Allowing patients to access clinicians from home to receive treatment and self-manage their care
2. **Telemedicine for health care workers (HCWs)** – Empowering HCWs to treat patients in the community while consulting with clinicians

# Step-Wise Approach for Telemedicine Implementation:



# 1

## Get the green light from government

*Address legal and regulatory considerations;  
secure required approvals*

Determine the scope of telemedicine services, develop a proposal in accordance with the legal requirements below, and obtain written approval from relevant government officials and stakeholders.

- **Technology applications** – Review legal requirements for using telecommunications technology to provide telemedicine services and design the system based on permitted modalities and appropriate medical uses.
- **Documentation and data security** – Develop a paper or electronic format that meets requirements for data documentation, storage, and security by which HCWs will document each telemedicine interaction.
- **Protect patient privacy** – Review requirements for maintaining patient privacy and protection of patient medical information while using telemedicine technologies.
- **Consent** – Review local requirements for obtaining and documenting patients' informed consent to participate in telemedicine encounters.
- **Patient and medical practitioner identification** – Based on local requirements, determine how patient identity will be confirmed (e.g., name, age, phone number, medical ID) and how medical practitioner identity will be shared with patients.
- **Determine which patients require in-person visits and how health care providers will contact patients in the event of a medical emergency** – Develop clear protocols for determining which types of patients are good candidates for telemedicine and which patients will require in-person visits. Create a system for contacting patients and referring them for immediate attention in case of medical emergencies.
- **Sending prescriptions** – Review local requirements for transmitting prescriptions including which medications can be prescribed via telemedicine and which technologies can be utilized.
- **General considerations** – Develop a mechanism for reporting any violations of telemedicine procedures and addressing any queries or grievances from patients.



## 2

### Identify telemedicine users

*Are some health care providers and patients already using digital technologies?*

*Are others ready to adopt new technologies?*

- **Medical doctors or officers**

- Ensure clinicians meet the appropriate certification and licensing requirements for local telemedicine service delivery.
- Select medical doctors or officers who can provide teleconsultation in two possible ways:

- **In-office “hub-and-spoke” model**

Clinicians can perform teleconsults in between in-person visits or during off hours with HCWs and patients in their local catchment area. This approach is more sustainable, but it may be difficult to guarantee availability of busy clinicians at health care facilities.

- **Remote, work-from-home pool**

Hire a pool of clinicians who take calls from HCWs or patients from home, or a centralized telehub. This approach keeps clinicians at home (which reduces exposure to infectious agents, e.g., COVID-19) and makes it easier to manage clinician availability. This option is feasible if facilities have an electronic record system that clinicians can access from home; however, it may be challenging if paper records are located at health facilities.

- **Other HCWs**

- Identify the HCWs and the levels of health facilities that will participate in telemedicine. This may include nurses, community health workers, pharmacists, or other paramedical professionals.

- **Patients**

- Empower patients to contact HCWs or doctors to request refills and consultations from home or in their community.



# 3

## Choose the tech platform

*An ideal platform is secure, widely used, accessible, and affordable*

- **Selecting a telemedicine platform** – Determine specific local telemedicine requirements such as:
  - Available technologies that can be used
  - Whether text, audio, and/or video is required
  - Whether real-time consultation is required or if asynchronous (at a later time) communication is allowed
- **If compliant, consider using a platform as basic as WhatsApp or the equivalent** – These services offer the possibility of widespread adoption by both patients and HCWs, thus allowing telemedicine to be quickly implemented to manage patients with NCDs.



# 4

## Align financial incentives

*Establish a feasible business model (e.g., provider reimbursement, insurance coverage)*

- **Determine insurance considerations** – Payment for telemedicine services will vary depending on individual country and health system structure.
  - Identify which types of services (e.g., telemedicine, virtual check-in, electronic communications) are covered by insurance and whether new or established patients are eligible for each service.
  - Determine which provider types are allowed to conduct telehealth visits.
- **Payment processes** – Certain types of telehealth services may be paid by different components of insurance policies, and payment may be dependent on the patient initiating the consultation.
  - Assess how telemedicine billing is influenced by reimbursement models (e.g., fee-for-service, single payer, global budget, capitation) or cost-sharing policies for the relevant patient populations in each country or region.
  - Review which types of covered virtual services are required to be initiated by the patient and/or via an external healthcare service.

- **Be transparent about financial cost to patients** – From the patient’s perspective, telemedicine encounters may feel less formal than a traditional office visit, and patients may expect telemedicine visits to be free of charge. If the telemedicine visit will require a patient payment or co-payment, health care providers should state expected patient costs at the beginning of the visit.



## 5

### Define workflows

*Ensure that telemedicine adds efficiency and enhances care*

- **Design workflows and develop standard operating procedures (SOPs) specific to the local setting** – SOPs should adhere to local legal requirements and undergo official approval.

Below are example workflows for patients and HCWs at community-based health centers. These workflows should be adapted to the local context and the relevant telemedicine platform (e.g., WhatsApp, other messaging/video service).

*(Note: the examples below contain workflows for both paper-based and electronic health record (EHR) systems).*

#### A. Telemedicine provided directly to patients?

Example workflow:

- Patients are informed of contact number for HCW or medical officer at health center
  - HCWs or medical officers share a communal phone or are issued individual phones specific to the program (as opposed to using their personal phones)
  - HCW or medical officer at health center is assigned to telemedicine and carries device
- Patient sends message to HCW or medical officer requesting refill or consultation
- HCW or medical officer locates patient’s paper or electronic record in register. If medical officer is not already involved, HCW engages medical officer for consult
- Medical officer reviews patient’s history and either writes prescription refill (or e-prescribes if possible) or initiates teleconsult (video or audio) with patient
  - **Note:** Refills can be done asynchronously

- HCW or medical officer sends photo of prescription refill to patient if no electronic system is available
- Patient visits local facility or private pharmacy to collect medications

## B. Telemedicine delivered at community-based health centers with support from HCWs

Example Workflow:

- Patient visits HCW at community clinic, or HCW visits patient at home. HCW may measure patient's blood pressure and/or blood glucose and sends message to medical officer at health center
- Medical officer requests patient's file (either through paper or electronic records), reviews patient's history, and either refills prescription (on paper or electronically) or initiates teleconsult (video or audio) with HCW and patient
- HCW or medical officer distributes medications if available or forwards prescription information to patient to pick up at pharmacy



# 6

## Train the health worker team

*Engage and train health care workers to empower treatment in the community*

- **Equip providers with the tools they need** – Develop simple training materials including algorithms and playbooks for HCWs and medical doctors or officers to follow. With adequate data security, HCWs may be able to use their personal mobile devices for telemedicine communications.
- **Create a monitoring and supervision plan** – Identify and respond to challenges as they arise to ensure smooth implementation.



# 7

## Engage patients

*Patients like to self-manage their care;*

*ask them to spread the word to family and friends*

- **Get the word out** – Notify patients that they may contact doctors from home or at community-based health centers to get refills or consultation.
  - Consider sending text messages to registered patients with NCDs with information on how they can contact a HCW directly via a chosen messaging platform.
  - Provided data security, patients may be able to use their personal mobile devices for telemedicine communications.
  - Train HCWs to instruct patients at all visits on how they can follow up using telemedicine.
  - Encourage patients to promote telemedicine within their communities.