

Set up an efficient data logging and entry system to record patient history and all the disease-relevant data. It is important to ensure that the software allows exchange of data that can be easily transferred between TCCs, care providers, and referral centers. Local telecommunication or technology companies may help provide the initial infrastructure and training required.

**What can you do to proactively address these areas?**

Discuss financing with local and international partners such as the Ministry of Health and, where applicable, reimbursement of Teleconsultations from the local healthcare insurance system from the beginning of the program. Produce an annual budget and emphasize that Telemedicine saves life and is cost-effective by saving time on unnecessary referrals.

\*Based on the Ghana Telemedicine pilot experience

We acknowledge the contributions of partners on the Ghana Telemedicine pilot: Airtel, Earth Institute, Columbia University, Ericsson, Ghana Health Service, the Ghana Ambulance Service, Ministry of Communication, Ministry of Health, and National Health Insurance Agency, MedGate, Millennium Promise Alliance, and St. Martin’s Hospital.

**Setting up reliable communication networks**

A common obstacle to the success of a Telemedicine service is an unreliable connection during the call. This could lead to missed instructions and lives put at risk.

A good telecommunication network is the backbone of a Telemedicine program. It should provide essential medical support by connecting the healthcare teams at all levels.

Partner with local telecom companies to plan and launch the Telemedicine program to provide the level of telecommunication service and coverage required in remote areas.

**Creating efficient patient information systems**

Potentially thousands of patients will be enrolled in the Telemedicine services. This will create a large amount of patient data, which needs to be captured by both the TCC and national medical records system.

**What to keep in mind when implementing a Telemedicine program?**

**Covering the program costs**

Setting up the initial infrastructure will cost money for all the different parts of the program, including setting up a Teleconsultation Center (TCC), human resource and training, mobile phones, computers, transportation for patients, etc.

**Guide for leadership roles**

**What to watch out for when implementing a Telemedicine program\***

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Consider both top-down and bottom-up approaches when expanding the program to other regions:

**At the local level,** you can strengthen the local infrastructure by working with local authorities, expanding network coverage and supporting ‘champions’ to drive local awareness and adoption of Telemedicine.

Simultaneously, **at the national level,** you can engage policy-makers, stakeholders, Ministry of Health and your national health services (where applicable) to support the scale-up of access and care, and to allocate adequate resources at each level.

**Setting up and financing Closed User Groups (CUGs)**

A large number of calls will be made every day to TCCs, which can make Telemedicine programs expensive to run. You may need to create CUGs, which are the calling and SMS services provided by mobile operators to groups of Telemedicine subscribers. This allows Telemedicine users to make and receive calls from all the members within the CUG.

**Scaling up a Telemedicine program**

It may be a challenge to roll out a national-level Telemedicine program, once you have successfully set up a pilot model in your country. The issues you may face will be at both local and national level.

**Need for policy reforms**

Depending on the laws of your country, policies that cause hurdles in rolling out a Telemedicine program may need to be changed. This policy reform may facilitate some or all parts of a telemedicine program. For example, tariffs to reimburse teleconsultation services may not exist, or the prescription medicine list for different Telemedicine levels of care may need changing.

Identify which policies are affecting the Telemedicine program. Then you can start to work with the Ministry of Health and relevant stakeholders to reform the existing policy. For example, reimbursement tariffs may need to be reviewed to ensure that all facilities involved in each patient case (TCC, referral hospital) receive the right reimbursement for teleconsultation services. This allows the healthcare provider at a higher level of care to continue providing Telemedicine support to lower levels of care. Policies may also be modified to make sure that a Community Health Worker is able to procure, stock and use emergency medicines **only with the permission/instruction of a qualified healthcare professional.**

**Support and maintenance of Information and Communication Technology (ICT) infrastructure**

ICT will be used to connect healthcare professionals/experts to local health workers in remote areas through the TCC. It is expensive to develop and maintain ICT infrastructure, especially as the service becomes scaled up.

Consider using open ICT platform technologies for the Telemedicine service, and train staff to use and maintain local ICT infrastructure so it remains affordable. It may be helpful to discuss with relevant ministries of communication and/or technology to support the national ICT infrastructure.

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Collaborate with local telecom providers to provide this service for your program at a reduced or minimal cost. You can also contact local philanthropic organizations for finances to set up CUGs, buy mobile phones, or train the staff. If these are not available, consider opting for toll-free numbers for the TCCs to which telecom operators may be more amenable than CUGs.

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