A PROMISING PRACTICE ON TELEHEALTH SERVICES IN A NETWORK OF FAMILY HEALTH CENTERS IN BANGLADESH

COVID-19 PROMISING PRACTICES

EXECUTIVE SUMMARY

- Bangladesh is a lower-middle income country in the process of strengthening their health system through the establishment of an essential package of health services and a national health management information system.
- The first local cases of COVID-19 in Bangladesh were documented in March 2020, resulting in a nationwide lockdown to control its spread.
- To prevent disruption in access to both COVID-19 and non-COVID-19 health services, the Ministry of Health has launched various telehealth initiatives in collaboration with the private sector, including a dedicated 24-hour service hotline.
- Praava Health, a network of Family Health Centers, was the first private provider in Bangladesh to support the government's 333 telemedicine hotline for COVID-19. Praava Health is developing additional tools to raise awareness and promote the use of telehealth as an initial triage tool, including an online risk screening tool, a Facebook chatbot, and a dedicated COVID-19 website.
- Successful implementation of telehealth requires adequate data infrastructures, well-trained staff, and clear management and communication protocols in dealing with patients.

BANGLADESH PHC AT A GLANCE

Population: 164.7 M
GDP/Capita: $3,869 (current USD)
Human Development Index: 0.61
Life Expectancy at Birth: 72.1 Years

- Bangladesh has a pluralistic health system comprising both the public and private sectors.
- Rural and urban health are governed by two distinct branches of the public health sector. The Ministry of Local Government, Rural Development and Cooperatives (MoLGRDC) is responsible for urban PHC. The Ministry of Health and Family Welfare is responsible for rural PHC. A basic package of essential services is available in most rural settings but government PHC services are virtually non-existent in urban areas due to gaps in infrastructure and services.
- Government PHC services are administered in rural areas through the 'Upazila health complex', which consists of three tiers: at sub-district level (the Upazila level), the union level, and the ward or community level. Planning for service delivery in the rural health sector is conducted at the central level with no involvement of PHC staff from the Upazila level or below.
- Primary care is widely overlooked in the private sector, which is responsible for more than 70% of health care spending.
- Despite government efforts to promote PHC as the first point of contact, most people go to the hospital when they are sick and there is very little emphasis on prevention.

COVID-19 IN BANGLADESH

As of 1 July 2020

149K
TOTAL CONFIRMED CASES

62K
RECOVERIES

1.8K
DEATHS

7 MAR 20 1ST CONFIRMED LOCAL TRANSMISSION

26 MAR 20 DECLARATION OF NATIONAL LOCKDOWN

6 JUNE 20 REIMPOSITION OF AREA WISE LOCKDOWNS

Bangladesh's COVID-19 response efforts have been primarily reactive. The country's response suffered from a lack of intersectoral coordination, a shortage of medical professionals, and challenges in enforcing risk mitigation measures, including social distancing and testing and contact tracing. Access to essential services for COVID-19 and non-COVID-19 conditions has been greatly disrupted due to hospital and clinic closures, overcrowding, and fear of catching the virus while seeking or providing care. The lockdown has introduced added barriers to timely access to care, where fewer than 20% of people could access critical care before the pandemic. Despite these challenges, Bangladesh has made some progress in managing the crisis through nationwide lockdown measures, additional investment in human resources, and collaboration with the private sector. Telehealth initiatives with the private sector, in particular, have helped to improve access to services in a system already stretched for time and resources. Praava Health, a network of Family Health Centers, is one such private partner that collaborates with the government to promote the use of telemedicine as a triage tool. Building on its existing primary care infrastructure, Praava Health has worked to expand its telehealth capacity to promote ongoing disease management, preventive care, and health education for its patients. The adoption of telehealth initiatives during the COVID-19 pandemic has allowed Praava Health to continue providing medical care to its patients and help mitigate the broad impact of the pandemic.

COVID-19 IN BANGLADESH:

LEVERAGING PRIVATE SECTOR TELEHEALTH INITIATIVES FOR IMPROVED ACCESS TO CARE



AN INTERVIEW WITH SYLVANA SINHA, DR. PARAMITA KARIM, AND KUTUB KAMAL

Sylvana Sinha, JD, MPAID is the founder and CEO of Praava Health. Sylvana Sinha was joined by Dr. Paramita Karim and Kutub Uddin Kamal of Praava Health. Praava Health is a network of Family Health Centers in Bangladesh working to build a better patient experience enabled by technology. The government has been collaborating with Praava to deliver telehealth services. Through their work, doctors provide remote consultations and identify, screen, and triage patients with COVID-19 symptoms. We interviewed them to learn more about their experiences in developing and delivering telehealth initiatives during the COVID-19 pandemic. Responses have been edited for length and clarity.

Question: How were remote services like telehealth used to maintain access to primary care during COVID-19? What prompted these changes?

Answer: To help identify and triage potential COVID-19 cases, the government set up a telemedicine hotline (333) in early March. This began as a relatively ad-hoc process, in which the government reached out to private providers to help manage overflow calls. Eventually, they encouraged all doctors across the country to do an online program that would certify them to work the hotline, including Praava Health doctors. To help meet high demand for these services, we onboarded medical officers to offer free screening calls for patients who were experiencing COVID-19 symptoms or were concerned they might have it.

Meanwhile, we began to screen and triage potential cases both through Praava's in-house hotline and by providing support to the government's dedicated 333 hotline for COVID inquiries. By the end of March, we converted all of our clinic appointments to telemedicine for services that could be provided remotely. Our clinic remained open for procedures and other services that needed to be delivered in-person, such as for pregnant women needing an ultrasound. Prior to the pandemic, Praava didn't have a comprehensive system for telehealth in place. However, we leveraged our existing information and communications technology and network of providers to expand our telehealth capacity.

Additionally, the government created a working telehealth action group with various health institutions and involved telehealth in their management pathways as it was clear face to face consultations were not advisable. The telemedicine companies in Bangladesh also created a Telemedicine Working Group to advise the government on various challenges we are all facing.

Question: How did you go about implementing these changes?

Answer: To make this transition to telemedicine, we spent about a week encouraging our patients and others to use remote services via our social media platforms and existing appointment systems. For example, when a patient phoned in for an appointment we asked them screening questions and followed up with a teleconsultation if they were experiencing any notable symptoms. This change required us to make decisions about who needed to be seen in the clinic, with requisite infection and prevention control measures. Some of the ways we've done this involve setting a dedicated website to support public education for COVID-19, which includes services ranging from Facebook live Q&A sessions with doctors to advocacy work with other doctors in the ecosystem to promote telemedicine to proactively reaching out to at-risk patients to check-in on their health status. Some of the innovations we've developed in service of this include a Facebook chatbot for addressing patient concerns and an online risk screening tool. Additionally, we're piloting a tool that allows for remote management of COVID-19 patients who don't require hospital-based care.

Prior to the pandemic, we had implemented an in-home collection system that helped ease this transition to remote care from a patient perspective. To ensure patients and staff felt safe delivering medicines to patients in their homes and collecting samples, we made sure to equip staff with appropriate personal protective equipment. As I mentioned before, we didn't have an telehealth system in place prior to the pandemic. However, we were in the process of piloting a teleradiology practice that was slated to roll out by the end of March and had started to provide some phone-based consultations for patients with chronic conditions. Additionally, by the end of 2020, we had planned to offer video consultations using a patient portal app we were developing and home delivery of pharmaceuticals for our patients. The COVID-19 pandemic accelerated our plans, and while we haven't fully piloted the app we were developing for these services, we've leveraged our existing integrated health information systems and patient portal to deliver remote care, including via google hangouts and WhatsApp groups. Eventually, the app will be equipped to meet all of a patient's digital health needs, including video consultations and chatting with doctors.

Question: Were there specific services that were shifted to telemedicine? How was this determined?

Answer: Initially, we had planned to convert all family health visits to virtual consultations. However, the reality was that some services would still need to be provided in-person, such as imaging and on-site procedures. To prepare for this transition, we scaled back our patient care and lab services from six floors of the building to two and began to screen every patient who entered the facility. We also implemented policies to mitigate the risk of spread and reduce the number of people coming in and out of our facility, including an 'attendant policy' which restricted patients to bringing only one family member or guest per visit, except for mothers with small children or those with disabilities requiring assistance.

Question: What factors helped to facilitate the implementation of telehealth services in your networks?

Answer: It's been a truly collaborative process to make this transition happen. From a technological standpoint, we already had a fully integrated health information system and patient portal in place that enabled providers and patients to remotely access health information. However, use of these systems really depended on the capabilities of staff to use them and required everyone to have a reliable computer and internet connection. We've helped ease this transition by providing technology and communication support to both patients and staff, and by leveraging platforms that patients already use, such as Facebook and Whatsapp. For example, we've used Whatsapp groups to coordinate home sample collections and other care needs. At a national scale, we've collaborated with the minister of information and communication technology to create a video that encourages people to use telemedicine. In terms of patient confidentiality, we've built-in a disclaimer into our self-assessment chatbot to inform patients that their information will be shared with the government for record-keeping purposes. For teleconsultations, identifying and tracking patient information is made easier by our unique patient identification system.

Question: What have been the challenges related to implementing this telehealth model in your family health networks?

Answer: Culturally, we rely on in-person interaction to communicate and connect. As a result of this, a lot of Bangladeshi patients and providers were resistant to telemedicine initially but generally, patients have been really satisfied. This shift has been more of an adjustment for doctors, who were really accustomed to the physical examination and in-person communication with patients and their fellow providers. It's also introduced some challenges to work-life balance for providers.

We've also experienced the typical technological challenges, including unreliable internet and system crashes. However, things have been running smoothly since the first few weeks. We don't currently have regulatory guidance from the government for which platforms to use for telemedicine, so we've primarily been using google hangouts because it's been the most reliable option. For now without a lot of regulation it's easy to shift from one platform to another based on patient needs. However, there are simply limits to what our family practitioners can do via telehealth or home-based services. We'd love to see more collaboration with the government to strengthen referrals to secondary services.

Financially, we charge an equivalent amount for remote consultations as we did in-person ones, with the expectation that the costs of any COVID-19-related consultations made through our hotline are 100% incurred by Praava. However, we have seen some challenges with the shift from cash to online payments, which has reinforced a need to set clear guidelines in terms of payment and reimbursement.

Question: How have these changes impacted access to care and other outcomes?

Answer: In some ways access has actually increased with the shift to telehealth services. This has particularly been the case for elderly, housebound, and other patients restricted in their movement. This has also helped us to save on cost, as home visits for housebound patients were quite expensive. We've also experienced an increase in demand for our services during COVID-19. Prior to the pandemic, a lot of people in Dhaka would go to Singapore, Bangkok, and other urban centers to seek care but given the nationwide travel restrictions, they're now using Praava's telehealth services to access in-country care.

On the flip side, certain groups, including younger demographics and patients requiring non-essential services (i.e. physiotherapy, steroid shots, nebulizers, etc.) may not be accessing care as much. For example, we've noticed a slight decrease in younger females seeking appointments and fewer questions regarding sexual health. It's also been challenging to effectively treat patients requiring more intensive care and follow-up, so we've really made an effort to keep tabs on patients with more complex conditions.

For management of COVID-19 cases, there are national guidelines available that define criteria of who can be admitted to hospitals. Initially the government had designated specific COVID-19 hospitals but now due to the huge number of cases, private hospitals have also been instructed to take COVID-19 hospitals. At the primary care level, Praava is in the process of creating a COVID-19 self monitoring tool that a patient can input their vitals and symptoms which links into the doctors dashboard. Typically, doctors would follow up with patients but due to increasing numbers, we are in the process of creating this tool to take the burden off primary care doctors. We also proactively reach out to our existing high risk patients to check in on them and help them to manage their risk of contracting COVID.

Question: What do you see as the future of remote care for Praava Health? In Bangladesh? Do you think these changes will lead to lasting change?

Answer: While in-person consultations will always be valued, we anticipate this will be a permanent shift, and translate to better access outcomes, particularly for patients living in rural and remote areas or otherwise limited in their movement. The majority of people have some sort of smartphone or access to technology, so, even when facilities begin to re-open, a lot of patients will likely continue to access care via telehealth if the option is available. Praava Health is offering telehealth services beyond Dhaka to support continuity of care for patients who relocate outside of the city. We have also developed an SMS-based remote symptom management tool to help those with mild and moderate COVID symptoms manage their health at home and prevent further transmission. While this type of remote health management is crucial to the current pandemic, it also offers applications beyond COVID-19 in monitoring and managing chronic illness and helping reduce the burden on an already saturated health system. To promote better coordination between primary and secondary care facilities, it would be great to see more collaboration with the government in this area as our family providers are limited in what they can do via telehealth or home services. Right now, if one of Praava's patients requires escalation of care beyond what we can do as a primary care facility, there is not a systematic way to follow their care trajectory and outcomes. Praava does offer some secondary care services, but better coordination through electronic health records and improved communication between primary and secondary facilities can ensure that we are providing patients with continuity of care and reducing redundancy. Ultimately, this will lead to cost savings for patients and the system, as well as better patient outcomes.

For example, Praava Health is currently engaged in COVID-19 testing for the general public. Since hospitals are not currently admitting patients unless they have already been tested for COVID, there is intense pressure on us to escalate critical patients' testing needs at the last minute. Greater leadership and coordination from the government would help facilitate greater collaboration and smoother connection between our testing and hospital admissions. Similarly, the government recently launched a plasma network titled "Shohojoddha" to facilitate the collection and distribution of plasma from patients who recovered from COVID-19 in Bangladesh. There are several healthcare and service providers involved in this initiative - including Praava - but we need additional guidance from the government on how to collect plasma and how to ensure it is used to treat patients according to best practice.

RELEVANT **RESOURCES**

RELEVANT IMPROVEMENT STRATEGIES

- Primary Health Care Policies
- Health Financing
- Quality Management Infrastructure
- Workforce and Team-based Organization
- Population Health Management
- Information Systems and Information Systems Use

GLOBAL LEARNING TOOLS AND RESOURCES

- OpenWHO
- PHCPI Community of Practice
- WHO, 2009 Telemedicine: Opportunities and Developments in Member States
- WHO - WHO eHealth Site
- WHO - Digital Health Site and Draft Global Summary on Digital Health 2020-2024
- WHO, 2015 - Third global survey on eHealth
- WHO, 2016 - Global diffusion of eHealth: making UHC achievable
- WHO, 2020 - Country & Technical Guidance - COVID-19
- WHO, 2020 - Maintaining essential health services: operational guidance for the COVID-19 context
- WHO, World Bank, and OECD - Delivering quality health services: a global imperative for UHC
- NEJM Catalyst - What is Telehealth?
- Knowledge Action Portal, 2020 - COVID-19 and NCDs and Digital Health Topics
- PATH, 2020 - Resources to support COVID-19 response in LMICs
- PATH, 2020 - Three urgent actions to protect essential health services during COVID-19