

2. Bangladesh Districts

National COVID-19 Intelligence Platform and the 333 National Telehealth Service

Challenges

In Bangladesh, as elsewhere, COVID-19 has exposed glaring gaps in public health preparedness for infectious disease outbreaks. The lack of a robust infectious disease surveillance and control system was particularly evident. Like many developing countries, Bangladesh also faced challenges such as a severe lack of testing capacity, limited health-care capacity, and the absence of a system for data-driven monitoring and response to the epidemic. The scarcity and inaccessibility of urgently needed data, absence of common data-sharing platforms, and different data-collection standards, formats and conventions for recording data plagued the decision-making process.

In a country of 165 million people, the journey to combat the COVID-19 virus started with only one reverse transcription polymerase chain reaction lab, with no idea where the disease was progressing faster or where to prioritize interventions in terms of additional ventilators, doctors, and intensive care units. That resulted in more than 1.1 million confirmed COVID-19 cases across the country, with over 19,000 deaths. That situation was exacerbated by the fact that the internet penetration rate in Bangladesh is still around 36 per cent⁴; approximately 64 per cent of citizens do not have access to the Internet, limiting people's abilities to enjoy the benefits of available online platforms.

Towards a Solution

Navigating a path out of the COVID-19 crisis through appropriate policy decisions required careful consideration of the information available. Thus, in the face of the crisis, Bangladesh integrated the efforts of many epidemiologists,

data scientists, economists, and researchers to construct the National COVID-19 Intelligence Platform. The whole-of-government approach drove the country to produce some innovative solutions to tackle the unfolding crisis by equipping policymakers with crucial data-driven information that helped them to take data-driven decisions. That was done through the creation of the COVID-19 Intelligence System. The system came into existence because of collaboration between public and private partners. Big data are collected in several streams through citizen self-reports from different telecom services (333, 16263, *3332#), from websites and mobile apps, from community health workers, etc. Analysis and analytics generated from the system made it possible to track disease progression from 7 to 10 days ahead of any kind of lab testing. It introduced many new ways of prioritization and intervention. As a result, the COVID-19 Intelligence System integrated COVID-19 case data, test data, test positivity, death data, hospitalization capacity, equipment availability, etc., into the system.



Source: a2i Programme & Directorate General of Health Services

A number of distinct technological solutions have been developed by the Access to Information (a2i) programme in

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collaboration with the Directorate General of Health Services and the Institute of Epidemiology, Disease Control and Research to monitor the nationwide COVID-19 situation and take timely policy responses and decisions to address the crisis through (a) syndromic surveillance; (b) mortality surveillance; (c) contact tracing; (d) epidemiological modelling; and (e) health-response planning and management. All of these solutions have been integrated into a single platform called the National COVID-19 Intelligence Platform, which has increased the accessibility of those data for policymakers and resulted in more timely decision-making. The platform not only visualizes the analytics

but also generates policy recommendations for the field administrators. The risk matrix generated on the platform clearly shows which districts have a high infection rate, enabling policymakers to take quick action. The platform provides real-time disease progression monitoring, policy guidance to the field administration and the field health administration, and real-time policy advocacy on resource allocation. Therefore, the platform has become one of the priorities of national Covid-19 decision-making. It is assisting the Government to make prompt, needs-based and high-impact interventions to help citizens and mitigate the effects of the COVID-19 pandemic.



Source: a2i Programme

To address the still limited internet accessibility in the country, the 333 national helpline service was launched on 12 April 2018. That service has been transformed into a national health line to help to address the pandemic. The national health line helps to draw a digital map to track COVID-19-positive patients and identify areas that are susceptible to contamination by

using information of mobile users. During moments of crisis, the inability to physically consult doctors has emerged as a crucial obstacle for citizens seeking medical assistance. The national helpline has stepped in to address issues ranging from relief assistance to telemedicine services throughout Bangladesh.

Project title	National COVID-19 Intelligence Platform and the 333 National Telehealth Service
Spatial scale of the initiative	Platform: Bangladesh (subdistrict level). Telehealth Service: nationwide.
Population involved	Platform: COVID-19 patients, hospitalized COVID-19 patients, suspected COVID-19 patients and population under community surveillance. Telehealth Service: all Bangladeshis.
Cities/Provinces/Countries/Territories/Regions involved	Platform: 64 districts in Bangladesh. Telehealth Service: nationwide.
Sustainable Development Goal target(s)	Platform: 3.d, 17.16, 17.17, 17.18. Telehealth Service: 3, 17.
Supported/Funded by	Platform: Directorate General of Health Services, Bill and Melinda Gates Foundation, Access to Information (a2i) programme. Telehealth Service: a2i programme.
Implementing entities	Platform: Directorate General of Health Services, a2i programme. Telehealth Service: a2i programme.
Project status	Ongoing
Project period	N/A
URL of the practice	Platform: https://corona.gov.bd/ Telehealth Service: http://333.gov.bd/