Technical Assessment

Strategic relevance and technical soundness

1. **The spread of coronavirus (COVID-19) caused by the novel coronavirus (SARS-CoV-2) is one of the most serious public health threats Indonesia has faced in recent history.** It is deadlier than seasonal influenza and at least ten times more contagious than SARS. The government of Indonesia (GOI) announced its first positive COVID-19 case on March 2nd. Since then, Indonesia has identified 15,438 confirmed cases and reported 1,028 deaths as of May 13, 2020 (Figure 1). High population density provinces (Jakarta, Java) are most affected, accounting for almost two-thirds of confirmed cases so far (Figure 2). As of the same date, Indonesia had conducted just 123,572 tests (on 0.04 percent of its population) – far lower than its neighboring countries contributing to fears that the number of undetected cases in the community may be much higher (Figure 3). The GOI also reported that there are over 240 thousand people currently under surveillance and awaiting testing. In addition, over 2,200 burials have followed coronavirus protocols in Jakarta where deaths are in excess by 40 percent compared to past patterns suggesting the number of COVID deaths is much higher and that the health system capacity to test and respond to serious cases has been inadequate.

2. **However, the full potential impact of COVID-19 is yet unknown.** While quantifying the magnitude of the economic impact will likely change drastically given the evolving transmission dynamics and containment measures, the overall growth outlook in Indonesia has deteriorated rapidly. Currently even in the best-case scenario growth does not exceed 2.1 percent for 2020. The range for Indonesia’s GDP growth in 2020 currently extends from -3.5 percent to 2.5 percent based on varying assumptions on the domestic containment measures and the severity of the global slowdown. A couple of Indonesia-specific models do exist with widely varying estimates on the number of infected and COVID-19-related deaths. The first study conducted by researchers at Imperial College London put the total number of infected between 145 to 250 million with deaths ranging from 419,000 to 1.2 million. A more recent model from University Indonesia (UI) using slightly updated data and more conservative assumptions estimated between 550,000 to 2.5 million would get infected, with deaths ranging from 12,000 to 240,000 depending on the severity of containment and suppression measures taken. Based on the social interventions that have so far been put in place by the GOI the UI model predicts that 1.8 million would be infected and 144,266 would die.
Figure 1. Following initial delays in testing, the number of confirmed cases has rapidly increased as test kits became available in mid-March.

Number of confirmed cases and deaths (as of May 13, 2020)

Source: Indonesian National Board of Disaster Management

Figure 2. High population density provinces (Jakarta, Java) are most affected.

Number of confirmed cases, number of recovered, and number of deaths (as of May 13, 2020)

Source: Indonesian National Board of Disaster Management
3. **Beyond the public health threat, the COVID-19 outbreak is already threatening the accumulation of human capital more broadly.** UNESCO estimates that country-wide school closings has affected more than 68 million learners (35 million male; 33 million female). The adverse effects of school closure disproportionately affect the more disadvantaged students, for which alternative arrangements (i.e. distance education programs) for care and instruction may be more limited. Seventy million Indonesians also work in the informal sector and 53 million are highly vulnerable to falling into poverty – beyond the 24.8 million of Indonesians who already live under USD 1 a day. The impact of limited mobility, reduced consumption, and loss of livelihood threaten the gains Indonesia has made to reducing poverty in recent years.

4. **Failure in the rapid mobilization of financing and coordination of response results in unnecessary casualties and significant socioeconomic consequences.** Countries’ response to the COVID-19 epidemic have mainly followed two main strategies – containment and suppression. **Containment** aims to reduce the health impact of the epidemic by protecting those most at risk. Examples of measures include case isolation of suspect cases, household quarantine of suspect cases, and social distancing of the elderly and others at most risk without widespread closures. In this scenario, casualties are frontloaded as the rate of infection grows exponentially until population (or herd) immunity is built and transmission dies out. **Suppression** aims to buy time to expand the health system capacity and/or until a vaccine becomes available. Suppression measures include the closure of schools and universities, case isolation, and population-wide social distancing. This scenario relies on reducing the replication rate (i.e. the average number of infected people per contagious person) so that the speed of recovery is higher than the speed of contagion allowing the virus to die out. As population immunity is slower to build, countries are vulnerable to second wave outbreaks until a vaccine becomes available.

5. **Until recently, Indonesia adopted mild containment measures focusing its efforts on a major fiscal influx to contain the public health and economic threats of COVID-19.** The more extensive the
containment/suppression measures, the longer they are in place, and the stricter they are enforced, the more negative the impact on the economy. Ideally, governments would manage this trade-off based on accurate epidemiological predictions of the effectiveness of different degrees of containment measures on the disease curve. In the absence of such data, the GOI chose limited containment measures (e.g. limiting mass gatherings and voluntary social distancing) and announced three major fiscal packages (IDR 434 trillion or 2.7 percent of GDP). The first package, revealed in late February, was valued at IDR 8 trillion and focused on protecting the tourism sector and affected households. The second package, announced in mid-March, was valued at IDR 21 trillion and focused on protecting supply chains by giving tax relief and facilitating imports and exports through non-fiscal measures. The third package, announced on March 31, was valued at IDR 405 trillion and focused on implementing a response to the COVID-19 crisis by expanding health, social protection and industry support. Only recently have more stricter suppression measures been put into place. On March 31st President Jokowi declared a National health emergency recently and urged social distancing measures in Jakarta and other affected regions. On May 1st the GOI issued travel ban for the Idul Fitri exodus1 began with sanctions to start being enforced starting May 7th.

6. **However, with the epidemic expected to peak in July, ramping up health system readiness to account for the increase in cases over the next 3 months will be critical in the short-term.** Indonesia’s size, population, socio-economic, and administrative diversity all pose unique challenges to the GOI’s public health response. The most pressing challenges to the COVID-19 health response include:

(a) **Inadequate service readiness.** The capacity to provide care for severe acute respiratory cases and other related COVID-19 complications is limited. Indonesia has 2,877 hospitals with a bed capacity of more than 300 thousand, about 7,000 of which are intensive care unit (ICU) beds, that is, 2.7 ICU beds per 100,000 population. This is far less than other countries (US, European countries) whose health care systems have already become overwhelmed, suggesting that Indonesia’s critical care infrastructure will also quickly become stretched (Figure 4). While there are more than 8,000 ventilators across the entire country, only around 2,200 were available in the 132 COVID-19 designated referral hospitals2. Frontline providers have reported a lack of adequate personal and protective equipment (PPE), clear protocols on patient flow, protocols on the use of appropriate medicines and supplies, and availability of equipment such as ventilators and oxygen meters. Hazmat and protective equipment is being rationed for most severe cases. In addition, the availability of health workers, especially specialists and epidemiologists, remains problematic in remote areas. Only 8 districts (out of 492) had at least 1 doctor per 1,000 population and 215 districts at least 1 nurse per 1,000 population.

(b) **Reduced laboratory capacity and limited testing ability.** The WHO’s interim guidance3 recommends biosafety level 2 (BSL2) for non-propagative diagnostic laboratory work (laboratory testing would belong here) and BSL3 for propagative work (e.g. virus culture, isolation or neutralization assays). In Indonesia, testing was recently expanded from the National Institute for Health Research and Development (NIHRD) – a BSL3 facility – to a broader network that now includes nine regional MOH laboratories and six non-government laboratories. All laboratories in the expanded network have either BSL2 or BSL3 certification. However, the Government has identified gaps in implementation including limited supplies for laboratory testing and capacity to respond to the surge in demand as the epidemic progresses. Reverse transcription polymerase chain reaction (RT-PCR) test kits only arrived in the country in early February. While considered the most accurate test (high sensitivity and specificity), testing capacity is limited as the test protocol is complex, expensive, and mainly suited to large, centralized diagnostic laboratories. Tests typically take 5-6 hours to complete but transport and shipping of clinical samples can add days to the

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1 Also known as mudik, where millions of Indonesian migrant workers travel home for to celebrate the end of Ramadan.
2 Hospital ASPAK Data
turnaround time in a country as widely dispersed as Indonesia. Availability of reagents has also limited testing ability. More recently, rapid portable diagnostic machines – considered the cutting edge of diagnostic technology – and the tests that go with them have come online. Companies like Cepheid have produced a COVID-19 cartridge for their GeneXpert machines that can return accurate results within 45 minutes. Indonesia already has one of the most widespread installations of GeneXpert machines (over 900 machines that are distributed nationwide across all provinces) potentially allowing the rapid scale up of testing in remote areas, especially if the cost of the cartridges can be negotiated down. However, projecting the number of needed kits and being able to secure them amidst high global demand remain challenging. Finally, the expansion of the network will also require a strong quality assurance mechanism and integration with surveillance information systems – linkages that do not currently exist. 

(c) **Low rated surveillance preparedness.** According to the 2019 Global Health Security assessment, Indonesia did not show evidence of conducting ongoing event-based surveillance and analysis for infectious disease nor did it collect ongoing or real-time laboratory data limiting its ability to carry out contact tracing. While there are separate disease surveillance systems for TB (SITT), HIV (SIHA), and malaria (SISMAL) – the only notifiable diseases in Indonesia – they rely on manual reporting at the facility level which then gets sent first to the district health office as aggregate data and then to the MOH. The burdensome number of different reporting forms at the facility level also make reporting compliance an issue. However, the MOH’s Center for Health Data and Information (*Pusdatin*) has recently adopted the District Health Information System (DHIS2)\(^4\) as its national standard for housing data from various sources. DHIS2 is an open-source, web-based platform that has several customizable modules. While currently the MOH is only using DHIS2’s routine or aggregate data entry functions, it does provide applications that can be downloaded in the web-browser portal to enter event and/or tracker-based data\(^5\) that would allow more advanced functionality as a surveillance system for COVID-19 as well as other notifiable diseases.

**Figure 4.** While there is wide variation in critical care infrastructure, the number of ICU beds in most countries will not be able to cope as the disease reaches its peak

![Critical care bed capacity](https://www.dhis2.org/covid-19)

7. **Recognizing its health system challenges, the GOI has put in place several concrete emergency measures**

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\(^4\) [https://www.dhis2.org/covid-19](https://www.dhis2.org/covid-19)

\(^5\) Routine data generally records aggregate counts at predefined intervals (e.g. monthly, quarterly, annually). Event-based data captures individual data at a particular time and place but is usually anonymous (i.e. without patient registration). Tracker-based data is an advanced form of event-based data with registration.
to strengthen its response. In particular, it recognized the need to:

(a) Establish a national task force to address COVID-19 and emergency response financing. The multi sector ‘COVID-19 Mitigation Acceleration Task Force’ led by the National Disaster Risk Management Agency (Badan Nasional Penanggulangan Bencana, BNPB) aims to improve coordination and increase the intensity of the national COVID-19 emergency response. The task force mobilizes the relevant government ministries and agencies, as well as private sector and community. The central government has also requested local governments establish local coordination units for COVID-19 that would feed into the national task force. In addition to the health sector fiscal stimulus package, government funding for the national emergency response was also made available by reallocating a Special Allocation Fund for physical infrastructure (Dana Alokasi Khusus Fisik) which is normally given to districts as an intergovernmental fiscal transfer. The declaration of a ‘State of Emergency’ has also legally enabled BNPB to access ‘On-call Funds’ in the government budget. Finally, the MOH is also currently revising their budget to reallocate MOH staff travel funds for the emergency response.

(b) Expand health system preparedness. The MOH has expanded the network of designated COVID-19 referral hospitals from 100 hospitals to 359 hospitals, including military and state-owned enterprise hospitals, in response to the growing number of suspected and confirmed cases (Figure 5). The Ministry of Finance (MOF) has already provided an additional IDR 3.3 trillion (over US$200 million) to the MOH to procure additional PPE, test kits, additional intensive care equipment, and contingency funds to cover incremental costs for coronavirus patient care and treatment. The latter is particularly relevant as health services for disaster victims are excluded from the National Social Health Insurance benefit package and often not covered in private insurance coverage. The GOI has also announced it would provide financial incentives on top of protective gear to reassure health care workers – an additional monthly payment of IDR 15 million for medical specialists, IDR 10 million for physicians and dentists, IDR 7.5 million for nurses and IDR 5 million to other medical staff. In addition, IDR 300 million is being provided in the event of death in areas that have declared a state of emergency.

Figure 5: Network of COVID-19 referral hospitals in Indonesia
(c) **Increase testing and surveillance.** The Government has planned an expansion of the designated COVID-19 laboratory network to increase testing capacity and turnaround time and ensure more equitable distribution, especially in remote regions. At the same time, the GOI is expediting the provision of new PCR machines and test supplies, conducting virtual training for laboratory technicians, and repurposing GeneXpert machines to also carry out COVID-19 testing. Given the wide availability of GeneXpert machines, securing COVID-19 cartridges at an affordable price would offer a good decentralized complement to PCR-testing done in the larger referral laboratories — expanding testing capacity as well reach. In a recent public statement on April 27th, the Director General of Disease Control (also the spokesperson of the National Task Force for COVID-19 Response) stated the GOI committed to meet President Jokowi’s 10,000 tests per day target. There may also be need for quick serological testing, especially to track the level of exposure in the community, which may help configure appropriate social distancing/lockdown responses and relaxation policies based on community-level exposure.

(d) **Ramp up public risk communication.** An important function of the COVID-19 task force is to manage public communication on the epidemic’s progression, the government’s response, and counter misinformation. Though communications are now being managed by BNPB, the MOH has a central role in technical knowledge.

(e) **Mitigate the social impact, including cross sectoral coordination in health security functions.** While initially the GOI encouraged tourism to Indonesia, travel restrictions and screening have now been put in place at all ports of entry, all visa exemptions and visa-on-arrival facilities have been withdrawn, and entry was suspended for passengers from affected countries (mainland China, Italy, Iran, and affected areas of South Korea and Japan). Since April 2, 2020, all foreigners are no longer permitted to enter Indonesia. The governor of Jakarta has declared a state of emergency. Indonesian Military and National Police are helping enforce social distancing in public spaces. The GOI has also temporarily converted the 2018 Asian Games athlete’s compound to a quarantine facility with 3,000 rooms functional now, and capability to increase the country’s isolation capacity to 22,000 beds, if needed. This highlights the need to i) scale up testing not just among those showing symptoms, but to the wider population to help get a better understanding of the epidemiology of the disease for more informed decision
making; ii) boost surveillance to target resources and containment measures more effectively; and iii) and increase the critical care capacity to better cope with the spread of the disease.

Expenditure framework

The Government’s broader COVID-19 health sector response is currently valued at around IDR 59.8 trillion (US$3.9 billion). The bulk of financing has been allocated to finance health service claims, increased infrastructure at COVID-19 referral hospitals, and operational support for the 38 vertical hospitals under the responsibility of the Directorate of Health Services (77 percent). Financial incentives for health workers for a period of 4 months including deaths benefits account for 11 percent; and PPE, test screenings, and the operational expenses for health quarantines make up the rest (12 percent). During Appraisal period, it was noted that 28 percent of the Government’s health program was allocated to BNPB but implemented by the MOH. Until the end of the negotiation, the MOH’s proposed program was still being reviewed and it was unclear whether the full budget would be allocated under the MOH, BNPB, or other Ministries. For this reason the Program boundary accounts for activities that are known to be under the purview of the MOH and estimated at IDR 14.72 trillion (US$974.83 million).

8. The PforR accounts for a subset of the MOH’s immediate response. The World Bank’s US$250 million accounts for 26 percent of the Program boundary. In the short-term the PforR aims to i) help expand health system preparedness by addressing the immediate needs of designated COVID-19 referral facilities; ii) strengthen the laboratory network and surveillance system to help increase testing and contact tracing; and iii) ensure MOH support for communications and coordination across sectors and levels of government.

9. The program development objective is to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in Indonesia. The PforR supports systemic changes to the health system that strengthen human capital and build resilience against future public health threats. The theory of change from results areas and activities to outcomes is summarized in Figure 6. In particular:

a) Results Area 1 will address hospital and health system readiness and systemic improvements in the quality of care. The PforR will support the expanded network of MOH-owned health facilities that have been designated as COVID-19 referral hospitals. It will ensure they are fully equipped to manage and treat the increase in severe respiratory illness and critical care patients. It is expected that by effectiveness the MOH would have already procured big ticket items such as intensive care equipment (e.g. ventilators, oxygen tanks) and initial supplies of PPE and test kits using their own funds. Instead, the PforR will primarily focus on hospital recurring costs such as financial incentives for health care providers, especially COVID-19 related specialists (e.g. internists, pulmonologists, and critical care specialists or intensivists), training for human resources, and additional medical equipment, PPE and test kits that may be needed. The PforR will also support the MOH’s development and implementation of infection control and safety measures in healthcare settings as well as treatment protocols to manage cases at all stages – for suspected cases, referrals, confirmed cases, and critical care patients. For medium-term outcomes aimed at strengthening the health system, the program will support the updating of the national pandemic preparedness plan including emergency funds flows and emergency procurement systems, development of a communication strategy and the improvement of reporting and strengthened surveillance system incorporating lessons from COVID-19 experience.

b) Results Area 2 will strengthen the GOI’s public health laboratory and surveillance systems. The PforR will support the development of national guidelines for laboratories adhering to BSL 2 or higher standards, covering sample collection, transportation, and laboratory testing procedures for suspected SARI or Corona viruses. Subject to the availability of affordable COVID-19 cartridges for GeneXpert machines, this
results area will also be able to provide consumables for testing to every province and district of the country, utilizing the large installed base of GeneXpert machines provided by the tuberculosis program. Support from the PforR will also promote the development and implementation of laboratory quality assurance mechanisms for those in the network. This is will include assessing the adequacy of laboratory equipment and supplies. Here too, protocols and quality assurance processes will be developed in-house and are not expected to rely on outside consulting services. In addition, the PforR will strengthen the GOI’s capacity to do to contact tracing and surveillance by supporting the surveillance hotline for community-based reporting of outbreaks and new illnesses among humans and animals. It will also encourage the expansion of Indonesia’s use of information systems, such as the DHIS2 platform used by Pusdatin, to include adoption of the event and/or tracker-based modules for COVID-19 and other notifiable diseases.

c) Results Area 3 will facilitate communication and coordination for pandemic response and preparedness. The PforR recognizes the need for the MOH to coordinate with other sectors and will support the development and establishment of mechanisms for communication of COVID-19 test results (in coordination with the subnational level), support BNPB and other agencies in developing messages on personal hygiene promotion and other preventive communications.

**Figure 6. Theory of Change**

<table>
<thead>
<tr>
<th>Results Area 1: Improve hospital and health system readiness, including the quality of care</th>
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<tbody>
<tr>
<td><strong>Impact</strong></td>
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<tr>
<td>Strengthened human capital and national systems for public health preparedness</td>
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<td><strong>Medium-term Results</strong></td>
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<tr>
<td>Reduced risk of COVID-19 infection among program beneficiaries</td>
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<tr>
<td>Reduced morbidity &amp; mortality due to COVID-19-related illness among program beneficiaries</td>
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<td><strong>Short-term Results</strong></td>
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<tr>
<td>Increased capacity to treat severe acute respiratory cases</td>
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<tr>
<td>Strengthened laboratory capacity</td>
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<tr>
<td>Improved reporting and surveillance</td>
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<tr>
<td>Enhanced community engagement and risk communication</td>
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<tr>
<td><strong>Results Areas &amp; Activities</strong></td>
</tr>
<tr>
<td>Results area 1: Improve hospital and health system readiness, including the quality of care</td>
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<tr>
<td>Expand service capacity to prevent, detect, and respond</td>
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<tr>
<td>Develop and implement infection control and safety measures in health care settings, including treatment protocols</td>
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<tr>
<td>Support human resource capacity and skills at all levels</td>
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<tr>
<td>Results area 2: Strengthen public health laboratory and surveillance systems</td>
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<tr>
<td>Develop national guidelines for laboratories covering sample collection, transportation, and laboratory testing procedures</td>
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<tr>
<td>Promote the development and implementation of laboratory quality assurance mechanisms</td>
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<tr>
<td>Support surveillance systems</td>
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<tr>
<td>Results area 3: Enable communication and coordination for emergency response</td>
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<tr>
<td>Support multisectoral coordination and management</td>
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<tr>
<td>Improve efficiency and stewardship of the national and sub-national response</td>
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<tr>
<td>Expand strategic communications and tailored behavior change efforts at all levels</td>
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<tr>
<td>Emergency PforR operation building on national systems and adapted to specific country-contexts</td>
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</table>

10. The PforR expenditures include only areas needed to achieve the program development objective and disbursement linked indicators. There is no duplication of expenditures with other World Bank operations (e.g. the Investing in Early Years and Supporting Primary Health Care PforRs). Given the MOH has already commenced procurement of items needed to equip designated COVID-19 referral hospitals and laboratories,
no large contracts needing Operations Procurement Review Committee approval are anticipated. It is estimated that expenditures for procurement of any additional items needed at designated facilities will not exceed 20 percent of the program financing. The PforR will support procurement only by the MOH, considering direct expenditure by subnational levels, hospitals and laboratories outside the program boundary. The expenditures included are from MOH’s national budget (APBN) (Secretary General, Directorates of Health Services, Prevention and Disease Control, Public Health, and the Health Research and Development Agency).

11. **PforR duration, geographic scope, and beneficiaries:** The PforR is intended to last 18 months addressing the immediate needs of the health response while making systemic changes to the health sector that will strengthen resilience to future outbreaks, including subsequent waves of COVID-19. The scope will be nationwide, benefiting the entire population of 268 million and covering all 514 districts. The primary beneficiaries will include suspected patients visiting hospitals and health facilities, the community at large, especially vulnerable and high-risk populations such as the elderly and those with chronic conditions, and health care providers who will be providing care to COVID-19 infected and other patients.

**Results framework and monitoring and evaluation capacity**

12. **The PDO will be monitored through the following PDO level outcome indicators:**
   (a) Reduced service readiness gap in treating serious respiratory illness patients (measured by the available number of critical care beds fully equipped as per national protocol).
   (b) Strengthened laboratory capacity (measured as total capacity for quality assured tests per day)
   (c) Improved reporting and surveillance system (measured as the availability of an improved surveillance system that incorporates lessons from the COVID-19 response experience)
   (d) Enhanced community engagement and communication (measured by the number of interactions with the COVID-19 phone line)

13. **The PDO indicators will be measured by several intermediate process and output indicators as listed in the table 2.** Intermediate indicators were chosen based on activities supported under each results area and closely reflecting the proposed disbursement-linked indicators (DLIs). The DLIs have been chosen based on the immediate response priorities of MOH and were developed in line with their plan of work as proposed and agreed with the MOF. Additional consideration in the choice of DLIs have also included the possibility of undertaking the due verification processes amidst a context of mobility restrictions and limited window of time available to ensure an effective response. The DLIs are aimed at addressing critical points in the results chain and maximizing reduction of morbidity and mortality in the country, while not adding to bandwidth challenges of the MOH by requiring extensive documentation or activities that are not an immediate response priority. The DLIs are organized in three tranches – the first tranche being available at effectiveness, the second on or after June 15, 2020 and the final tranche on or after April 15, 2021. Disbursements are aligned with the estimated cash flow needs of the MOH.

**Table 2. Intermediate and PDO indicators, by results area**

<table>
<thead>
<tr>
<th>Results areas</th>
<th>Intermediate indicators</th>
<th>PDO indicators</th>
<th>Related DLIs</th>
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</table>
| Addressing hospital and health system readiness needs | • Concrete measures to support and compensate health professionals for added COVID-19 related workload and risk are implemented  
• Number of beds temporarily converted for patient isolation and/or low intensity medical care  
• Number of COVID-19 cases successfully treated, | Reduced service readiness gap in treating serious respiratory illness patients | DL1, DL3, DL4, DL5, DL6, DL8 |

Table 2.
disaggregated by sex
• Infection prevention and clinical management protocols developed and disseminated to all non-referral facilities

Strengthening public health laboratory and surveillance systems
• Cumulative number of COVID-19 suspects tested by PCR or rapid molecular testing, disaggregated by sex
• A surveillance mechanism for community-based reporting of outbreaks and new illnesses among humans and animals is functional

Communication and coordination for pandemic response and preparedness
• MOH supports the creation of a multi-sectoral coordination mechanism for COVID-19 response

<table>
<thead>
<tr>
<th>Disbursement Linked Indicator</th>
<th>Verification procedure</th>
<th>Achievement is measured by:</th>
<th>Implementing Units within MOH</th>
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<tbody>
<tr>
<td>(1) DLI 1: Specific additional measures to support and compensate health professionals for added COVID-19 related workload and risk are implemented</td>
<td>- The issuance of the implementation guideline (Juklak or Juknis) by the MOH, and checking appropriate instruction/order authorizing this payment, and the payroll of staff at COVID19 designated referral facilities for top-up payments. - Administrative evidence on the payment, and random sample of phone calls to health workers in the recipient list;</td>
<td>National Institute for Development and Empowerment of Human Resources for Health (Badan PPSDMK) (Note: A verification team will be established and housed by the Secretary of Badan PPSDM)</td>
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<tr>
<td>DLI</td>
<td>Description</td>
<td>Details</td>
<td>Responsible Authority</td>
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| 2   | MOH works closely in coordination with the country's multisectoral National Task Force to Accelerate the Response to the COVID-19 Emergency | - The decree on the establishment of such task force, in which MOH is sits as one of the Vice-chairs  
- Other decrees/ circular from BNPB/National Task Force on the distribution of roles and responsibility | Secretary General |
| 3   | Increased capacity for patient isolation and medical care | - MOH administrative records on the establishment of ‘field hospital’ or temporary emergency hospital against site visit.  
- Definition of needed equipment and HR to be defined by the MOH plan (referring to the WHO guidelines/standards) | DG of Health Services (Directorate of Health Services Facilities) |
| 4   | Health facilities’ readiness for emergency response | - Checking administrative data on the number of beds at referral hospital along with random sample of site visits.  
- Definition of fully equipped to be defined by national protocols for equipment, supplies and HR referring to the MOH plan/WHO standards | DG of Health Services (Directorate of Referral Services) |
| 5   | Strengthen the implementation of optimal infection and control measures in health care settings | - Checking MOH procurement records and hospital dispatch/ receipt records  
- Checking MOH/BNPB record for reserve | Secretary General, The Center for Health Crisis Management |
| 6   | Protocols for infection prevention and clinical management of patients with respiratory symptoms | The Infection Control Protocol has been issued  
Review of documentation and confirming completion and issuance of protocols and evidence of dissemination; | DG of Health Services (Directorate of Referral Services) |
| 7   | Installed capacity of quality-assured COVID-19 confirmatory tests per day | - Number of tests per day increased from a baseline of 3,000 tests per day to 20,000 tests per day tested by PCR or rapid molecular testing, disaggregated by sex  
- Checking the availability of equipment and supplies at the COVID19 designated labs.  
- Quality assured capacity is the subset of this capacity, in all the designated labs showing records of external quality assurance and records on regular calibration of equipment | National Institute for Health Research and Development – NIHRD (Balitbangkes), The Center for Biomedics and Basic Health Technology |
| 8   | Updated National Pandemic Preparedness Plan and regular simulation exercises | - The verification of updated pandemic preparedness plan being issued  
- Number of Simulation Exercise conducted is verified by administrative data | Secretary General, The Center for Health Crisis, The Center of Analysis of Health Determinants (PADK), and The Center for Health Crisis (PKK) |
| 9   | Communications strategy on COVID-19 status, responses, and personal hygiene promotion updated based on COVID-19 experience | - The issuance of the national public risk communication plan that includes COVID-19 status, responses, and personal hygiene promotion, based upon its experience and lessons-learned up to such date. | Directorate General of Public Health (Directorate for Health Promotion) |
Evidence of the implementation of the plan
- Enhanced community engagement and communication (as measured by the number of interactions with the COVID-19 phone line) (Number)
- Cumulative number of website visitors to the COVID-19 communication portal set up by the Government of Indonesia
- Number of times MOH counters COVID-19 related misinformation and posts on its website

(10) DLI 10: Improved reporting and strengthened surveillance system in place, incorporating lessons from COVID-19 experience
- Administrative data that the improved surveillance system has been developed
- Review of the surveillance system that is based upon experience and lessons learned on COVID 19 to date
- A surveillance mechanism for community-based reporting of outbreaks and new illnesses among humans and animals is functional (Yes/No)

Center for Health Data and Information (Pusdatin) has been appointed as the leading unit.
This will involve Directorate General of Disease Prevention & Control (Directorate Surveillance and Health Quarantine), NIHRD (Center for Biomedics and Health Technology), and the Directorate for Referral Health Services

Figure 7. Implementation arrangements

Economic justification
16. The theorems of welfare economics have commonly provided the framework for justifying government involvement in the health sector. In a free market economy, the competitive equilibrium of health care goods and services often falls short of the social optima given the pronounced market failures of the health sector. The classical arguments for how health care is different from that of other commodity markets are generally
grouped into discussions on i) neglected externalities; ii) information failures; and iii) risk and uncertainty. COVID-19 presents a serious public health threat that meets all three criteria. First, diseases that are transmitted either through physical or environmental contact such as smallpox, polio, tuberculosis, influenza and now COVID-19 generally fall under the neglected externality argument; and interventions to contain communicable diseases are generally considered merit goods as they have positive externalities that extend beyond the select group who can afford to pay for them. Second, the average person generally has less information about prevention measures, early symptoms, and the need for health care. This allows misinformation to thrive creating an atmosphere of fear and mistrust. Third, the risk and uncertainty of falling ill to COVID-19, a partial and/or lengthy recovery, or death exposes individuals to potentially ruinous medical expenditures and loss of earnings during extended sick days. In addition, there are often ethical and welfare-enhancing arguments put forward calling for government intervention such as the provision of health insurance as a social security undertaking with an explicit concern to tackle poverty, invest in human capital, and promote economic growth.

17. A simplified cost-benefit analysis suggests that the PforR will generate a positive cost to benefit ratio making the project a good investment. The World Bank’s US$250 million, the Asian Infrastructure Investment Bank’s (AIIB) US$250 million co-financing commitment, the Islamic Development Bank’s (IsDB) US$200 parallel financing arrangement, and the GOI’s US$274 million brings the total Program cost to US$974 million. Taking UI’s estimate of 240,000 deaths under a no intervention scenario, and the assumption that the PforR will reduce the number of deaths by 15 percent (or save 36,067 lives), the value of a statistical life saved is conservatively approximated to be Indonesia’s GDP per capita – US$3,894 in 2018. Assuming that individuals saved have 10 years of remaining working life, the total benefit from the project is roughly estimated to be US$1,404 million – a cost to benefit ratio of 1.4. Using the lower bound of the more aggressive Imperial study yields an even higher cost to benefit ratio of 2.5 (using 62,986 lives saved and a benefit of US$2,452 million).

Conclusion

18. The technical assessment concludes that the proposed PforR is strategically relevant, technically sound, and a good investment. While it identifies some potential risk of misreporting progress given that disbursement is linked with performance, the use of an independent verification agency and a detailed DLI verification protocol developed in accordance with procedures set out in the Program Appraisal Document, the legal agreement, the program action plan, and the verification protocol terms of reference help mitigate this risk.