Sustainable Health Financing for COVID-19
Preparedness and Response in Asia and the Pacific

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To make health systems more resilient to shocks and crises, it is critical for governments to invest in core health system functions such as financing, service delivery, and governance. Ensuring sufficient resources for health is necessary for basic infrastructure including vaccines; the overall level of health expenditure and the public sources of funding are important. Funding for public health services, including infection prevention and control, surveillance, and information systems, is fundamental to ensure health systems are prepared for and respond to health emergencies. Funding should be made available for a quick and effective response to emergencies, requiring a supportive flexible public financial management system. Moreover, it is essential to mitigate the potential risks of health system collapses through innovative ways, for example, telemedicine, and mobilizing private sector providers. Vulnerable groups who are even more impacted during crises need special attention. Multisectoral cooperation is paramount to health system resilience during pandemic response.

Key words: Asia and the Pacific, COVID-19, health financing, health system, preparedness and response
JEL codes: I14, I15, I18

1. Introduction

The COVID-19 pandemic has exposed structural fragilities and deepened pre-existing inequalities in the health systems both within and across countries. Due to the COVID-19 crisis, the growth rate of the world economy in 2020 is projected to have decreased by 6–7 percentage points with 90% of countries experiencing negative

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growth rates. The pandemic crisis may also have a negative impact on poverty rates and inequalities (World Bank, 2020a). The impacts of increasing poverty and decreased income go beyond the monetary losses and include the deleterious impacts on health, education, nutrition, and living conditions particularly for the poor and the vulnerable. The COVID-19 pandemic may affect low- and middle-income countries (LMIC) disproportionately; with the large informal sectors, limited fiscal space, and poor governance, LMIC are more vulnerable to the deleterious impact of the COVID-19 pandemic and the containment measures (Loayza, 2020).

Investments in health systems can build resilience to shocks like the COVID-19 pandemic. As seen in the 2014 Ebola outbreak centered in three West African countries, reduced funds to their health systems and reduced numbers of health providers prior to the Ebola outbreak weakened their health systems; leaving these countries poorly equipped for the Ebola outbreak and already suffering from substantial fiscal deficits (Kentikelenis et al., 2015). As countries are coping with the COVID-19 pandemic, some of the countries that have invested in health systems appear to have been better able to cope with health emergencies and the COVID-19 crisis. Investing in health systems not only facilitates development of resilient health systems, but also provides an essential basis for sustainable and inclusive growth.

This paper aims to summarize the impact of COVID-19 in Asia and the Pacific and to provide the practical approaches for strengthening sustainable health financing and maintaining health system resilience. We will also discuss key lessons learned.

2. COVID-19 Pandemic and Impacts in Asia and the Pacific

From the very beginning, many countries have taken proactive and strategic measures to contain the pandemic, including nonpharmaceutical interventions (NPI) such as closing borders, schools and businesses, workplaces, and restricting movement and gatherings, as well as conducting active surveillance, contact tracing, and case management. By April 2020, more than 80% of the countries in the world imposed strict containment and mitigation measures to suppress the spread of COVID-19; by early 2021, almost all countries had imposed containment measures (Hale et al., 2021). A strong gradient in the timing of containment policies with income status was found. Low-income countries (LIC) and lower-middle-income countries initiated suppression measures earlier than upper-middle-income countries or high-income countries (HIC) (Walker et al., 2020).

These containment measures as part of the COVID-19 response have changed all aspects of societies and economies. Looking on the bright side, countries observed decreased rates of influenza and other infectious diseases, reduced motor vehicle and sports injuries, avoidance of unneeded curative and preventive care, dramatic increases in telemedicine, investments in virus detection and vaccine development, increased awareness of challenges facing minorities and people with disabilities, increase support for universal health coverage (UHC), and renewed public support for government
involvement in the health sector (Lal et al., 2021; Nelson, 2020; Soo et al., 2020). Moreover, from an economic perspective, the COVID-19 pandemic brought about some positive changes including massive gains in selected industries, a resurgence of internet-based technologies, reduced use of energy in industry and transportation, learning how to do business remotely, incredible developments in medical technologies, and increased awareness of burdens facing women, minorities, and small businesses (Okyere et al., 2020; Zambrano-Monserrate et al., 2020).

However, the COVID-19 pandemic has caused more negative impacts on the health sector and economy, especially in LMIC. Figure 1 shows the negative impacts of COVID-19 on health systems and economies. Globally, many health systems are being overwhelmed by the response to COVID-19 even in relatively highly resourced settings; governments are also struggling to maintain essential health service delivery through establishing effective patient flow in order to mitigate the risks of health system collapses (United Nations [UN], 2020). Governments have made efforts to secure medical supplies including personal protective equipment (PPE), masks, and essential medicines. Overall health expenditure for the COVID-19 response was estimated in the range of US$234 to US$387 billion (or 0.3–0.5% of global gross domestic product [GDP]; Asian Development Bank [ADB], 2020a).

2.1 Health sector impacts
Preliminary evidence has emerged to show that essential services have been directly and indirectly disrupted due to COVID-19 globally. Service delivery of maternal and child health, HIV, tuberculosis, and malaria is at risk of being halted or reduced in

![Figure 1](https://wileyonlinelibrary.com)
scale in LMIC because of a lack of resources and restrictions on movement. Evidence showed that reductions in the coverage of about 15% for 6 months would cause a 9.8% to 44.7% increase in under-five child deaths per month and an 8.3% to 38.6% increase in maternal deaths per month across the 118 countries (Roberton et al., 2020). In high-burden LMIC, deaths due to HIV, tuberculosis, and malaria over 5 years could increase by up to 10%, 20%, and 36%, respectively, in comparison with no COVID-19 pandemic situation (Hogan et al., 2020).

In many countries, implementation of NPI has affected disruptions to essential health services, such as noncommunicable disease (NCD) services. Based on the World Health Organization’s (WHO’s) rapid assessment of service delivery for NCD in the COVID-19 pandemic, partial or complete disruptions to NCD services were reported in 120 countries by May 2020; rehabilitation services were mostly disrupted (more than 60% of countries), followed by hypertension management (more than 50%), diabetes and diabetic complication management (about 50%), asthma services (about 50%), palliative care services (about 50%), urgent dental care (about 45%), cancer treatment (more than 40%), and cardiovascular emergencies (about 30%) (WHO, 2020c).

The COVID-19 pandemic will cause a growing backlog of health services deferred in the future. During the pandemic, hospitals have reduced elective surgery in order to protect patients and health workers from the risks of infection of COVID-19. According to COVIDSurg Collaborative (2020), expert opinion and regression analysis for 190 countries show the 12-week cancellation rate for benign surgery, cancer surgery, and Caesarean sections would be 81.7%, 37.7%, and 25.4%, respectively. HIC are likely to have higher cancellation rates for benign surgery and lower cancellation rates for cancer surgery and C-sections (Table 1). It could take a year or more for countries to clear this backlog (excluding canceled C-sections cases) (COVIDSurg Collaborative, 2020).

Alternative strategies for maintaining health services have been implemented in most countries. According to the WHO rapid assessment of service delivery for NCD services, triaging of COVID-19 and non-COVID-19 patients to determine priorities has been implemented in more than 60% of the countries participating in the survey. Among the countries reporting disruptions to NCD services, 58% of countries are now implementing telemedicine, and 42% of LIC are using telemedicine (WHO, 2020a).

The impact of COVID-19 on access to health services has been significant among vulnerable groups, such as women, children, adolescents and youth, people with disabilities, the elderly, the poor, and other minority groups who might be disproportionately affected by COVID-19 containment and mitigation measures, such as home isolation, quarantine, and lockdowns (Shadmi et al., 2020). These vulnerable groups may have higher rates of comorbidity of chronic conditions, which put them at higher risk of COVID-19 infection and of the severe consequences of COVID-19 and other NCD (van Dorn et al., 2020). The United Nations Population Fund (UNFPA) estimated that 47 million women in 114 LMIC may not be able to access modern contraceptives with major disruptions to health services; 7 million unintended pregnancies are likely to occur if lockdowns continue for 6 months (UNFPA, 2020).
Health systems face the physical and mental exhaustion of health workers in response to COVID-19. As the frontline workers in the fight against COVID-19, health workers are at greater risk of infection. Excess workload/work hours, inadequate PPE, and feeling inadequately supported were major reasons for adverse psychological consequences due to COVID-19 (Spoorthy et al., 2020). Any losses and adverse psychological consequences among health workers have negatively affected health system capacity in countries.

2.2 Socioeconomic impacts
The COVID-19 pandemic and associated containment and mitigation measures have also disrupted global supply chain and economic activities. Restrictions on the movement of labor and transportation affected the economy’s production (supply shocks), leading to massive job and income losses (demand shocks). Border closures and the cancellation and reduction of flights have reduced the movement of people as well as goods across borders (ADB, 2020a; UNDP, 2020). According to the International Monetary Fund (IMF), the global economy is projected to contract by 3.3% in 2020 and to grow by 6% in 2021 and 4.4% in 2022 (IMF, 2021). The World Bank also estimated that a 4.3% contraction in global GDP in 2020 is projected, leading to the deepest global recession in 80 years; global GDP is expected to grow by 4% in 2021 (World Bank, 2021).

Table 1 Best estimates for cancellation rates during 12 weeks of peak disruption due to COVID-19 (%)

| Source: COVIDSurg Collaborative (2020). |
|-----------------------|-----------------------|-----------------------|-----------------------|
|                      | Benign disease | Cancer surgery | Obstetric surgery | Total  |
| World                 | 81.7          | 37.7          | 25.4              | 72.3   |
| High income           | 83.6          | 30.3          | 20.1              | 72.7   |
| East Asia and Pacific | 84.6          | 28.7          | 21.7              | 73.4   |
| Europe and Central Asia | 83.7          | 30           | 20.9              | 72.7   |
| Upper-middle income   | 80.4          | 43.4          | 26.4              | 72.1   |
| East Asia and Pacific | 79.6          | 47.8          | 27.9              | 72.8   |
| Europe and Central Asia | 81.5          | 37.8          | 23.2              | 70.2   |
| South Asia            | 82.1          | 45.1          | 24.6              | 72.2   |
| Lower-middle income   | 78.8          | 56.8          | 29.5              | 71.6   |
| East Asia and Pacific | 79.5          | 55.3          | 28.6              | 73.2   |
| Europe and Central Asia | 80.8          | 48.3          | 24.4              | 73.7   |
| South Asia            | 79            | 60.1          | 28.9              | 70.9   |
| Low-income            | 75.1          | 70.2          | 34.6              | 67.7   |
| Europe and Central Asia | 78.6          | 57.2          | 30.4              | 70.7   |
| South Asia            | 75.2          | 69.8          | 34.4              | 68     |
The growth rate in developing Asia is projected to contract by 0.4% in 2020, which will be the lowest regional growth rate since 1961; growth is projected to be at 6.8% in 2021. Excluding the newly industrialized economies, such as Hong Kong, China, the Republic of Korea, Singapore, and Taipei China, regional growth is projected to contract by 0.3% in 2020 and to grow by 7.2% in 2021. East Asia is projected to grow by 1.6% in 2020 and 7% in 2021; growth for China is projected at 2.1% in 2020 and at 7.7% in 2021. Growth in South Asia is projected to contract by 6.1% in 2020 and grow by 7.2% in 2021; India is expected to contract by 8% in 2020 and grow by 8% in 2021. Southeast Asia is expected to contract by 4.4% in 2020 and grow by 5.2% in 2021. The Pacific and Central Asia are projected to contract by 6.1% in 2020 under a global tourism collapse and by 2.1% in 2020, and to grow by 1.3% and 3.8% in 2021, respectively. Regional inflation is expected to be 2.8% in 2020 and 1.9% in 2021 because of depressed demand and lower oil prices (ADB, 2020c).

One huge impact of the COVID-19 pandemic is massive job and income losses. In China, about 5 million people are estimated to have lost their jobs in January and February 2020 (ADB, 2020b). Based on an analysis using the Global Trade Analysis Project model, 158 to 242 million jobs will be lost under the 3- and 6-month containment scenarios (6–9.2% of total employment), which is more than seven times the drop in employment over the period of 2008–2009 of the Global Financial Crisis. The drop in employment could reach 109 to 167 million jobs (70% of total employment losses globally) in Asia (ADB, 2020a).

The International Labour Organization (ILO) estimated that about 1.6 billion informal economy workers (76% of informal employment) worldwide, which is nearly 50% of the global workforce, are greatly affected by the decline in working hours due to lockdowns. In Asia and the Pacific, about 1 billion informal economy workers (73% of informal employment) are impacted by job and income losses; in HIC, about 86 million informal workers (73% of informal employment) are affected; in upper-middle-income countries, 395 million informal workers (55% of informal employment); in lower-middle-income countries, 914 million informal workers (94% of informal employment); and in LIC, 197 million informal workers (77% of informal employment). Women were heavily affected; among informal economy workers affected, 42% of women are in highly affected sectors compared to 32% of men. According to the ILO, income losses for informal workers are estimated to be massive; in the absence of income support measures, earnings are projected to decrease by 60% in the first month of the COVID-19 pandemic globally; 28% in upper-middle-income countries; 82% in lower-middle-income and LIC; 76% in HIC; and 22% in Asia and the Pacific (ILO, 2020).

Remittances to Asia and the Pacific are important and stable sources of income for households, amounting to US$315 billion in 2019. The COVID-19 pandemic is likely to decrease remittances in Asia and the Pacific. In 2019, 6 of the 10 largest remittance recipients worldwide came from this region, including India, China, the Philippines, Pakistan, Bangladesh, and Vietnam. Particularly, Tonga, Samoa, and other Pacific countries have a relative higher share of remittances in their economies and households’ income. Total remittances to Asia are likely to decrease between US$31.4 billion...
(baseline) and US$54.3 billion (worst-case) in 2020, which is about 11.5% and 19.8% of baseline remittances, respectively. This could push many people into poverty (ADB, 2020b).

The COVID-19 pandemic is bound to affect poverty. The poorest will be disproportionately affected by the health and economic crises due to the COVID-19 pandemic. Consequently, the pandemic will have an impact on poverty and inequalities; 48 to 135 million people will be pushed into poverty globally by the economic crisis (World Bank, 2020a). The World Bank estimated that at least 11 million people in East Asia and the Pacific would fall into poverty, particularly in South Asia (World Bank, 2020b). If the Gini efficient increases by 2% in all countries, which is not unusual during a crisis, 83 to 200 million people will be pushed into poverty, and the income growth rate of the lower 40% of the population would decrease by an additional 2.7 percentage points on average (Loayza, 2020). Impacts from increases in poverty and decreases in income, particularly among the poor and the vulnerable, would be harmful to health, education, nutrition, and living conditions, seriously affecting human capital development.

Moreover, recent reports estimated that increases in gender-based violence and sexual exploitation and abuse are expected, highlighting a worsening of existing gender inequities as a result of the pandemic. Thirty-one million additional cases of gender-based violence are expected to happen if lockdowns last for at least 6 months. Risks of violence are likely to increase because of restrictions on movement, combined with the fear, tension and stress associated with COVID-19, and the negative impacts on household incomes (UNFPA, 2020).

3. Sustainable Financing for Health System Resilience

The current crisis has tested the features of sustainable financing of health systems and their pandemic preparedness. Resilience in revenue raising, pooling, purchasing, and service delivery has proven to be key in responding to such crises. Countries need to evaluate their existing arrangements in light of their current experiences to rebuild and prepare for future crises as well to improve the efficiency and access to health care.

3.1 Revenue raising

Public health functions are a key component of preparedness for a pandemic. Tax funding is more efficient than contribution-based systems to enhance pandemic preparedness, especially when contributory schemes do not cover the entire population or when it is based on multiple separate pools, which is the case in many LMIC. Compared with contribution-based financing, government funding has a higher capacity to swiftly implement countercyclical fiscal measures and adjust entitlements to ensure access to care during a pandemic.

In a pandemic crisis, general revenue declines because economic activity shrinks. External revenue for LMIC is likely to decrease when the economies of HIC are also hit hard by a pandemic. Revenue for social health insurance systems also declines due to unemployment and decreases in wages, and the financial health and reserve funds
of contributory schemes can help quickly respond to a pandemic. Falling into unemployment and the inability to pay contributions harms the financial protection of the unemployed as well as the fiscal stability of a contributory financing system. To overcome the decline and unpredictability in the revenue generation in health financing, a government’s willingness and flexible public financial management (PFM) rules and processes are necessary to facilitate quick reprioritization and reallocation of public funds and emergency injection of additional funds to the health sector. Otherwise, a potential underinvestment in the health system and slowdown of the progress to UHC would be expected.

3.2 Pooling
In general, a bigger pool is more efficient and equitable than a fragmented system of multiple pools. A single pool is more efficient for pandemic preparedness, which is related to externality across regions/districts and population groups. Fragmented pools may be reluctant to invest in preparedness that benefits the enrollees in other pools. A single pool can effectively steer and govern the development, investment, and implementation of preparedness and coordinate the response across all relevant stakeholders (OECD, 2020).

In response to a pandemic, a big single pool can also work more efficiently to purchase from health care providers and cover services across different localities and pools. Even in a single pool of contributory financing, coordination between contributions and the government budget is important during a pandemic response. In a system of multiple pools, harmonization of entitlements and service coverage across pools, risk equalization, and uniform information systems are strengthening health system preparedness and resilience during a health crisis (Mathauer et al., 2019). Efficiency gain from pooling also contributes to additional fiscal space.

3.3 Purchasing
3.3.1 Service coverage
Health financing should provide comprehensive coverage and access to essential medicines and health services, which include pandemic preparedness. Some key public health functions, capacities, tests, and PPE, among others related to a pandemic response, should be available as an entitlement without financial barriers (Kutzin, 2020). A PFM system needs to include special arrangements and procedures that allow fast and transparent flexibility to reallocate funds or purchase goods and services to meet changing needs in the response to a pandemic, such as for the elderly, the poor, and vulnerable. Purchasing arrangements need to be in place for such crises to ensure minimum disruption to the provision of essential health care, such as vaccination, mental health, NCD, and reproductive, maternal, and child health services. They also need to protect health care providers to adjust to changing demand.
In Asia and the Pacific, COVID-19 services in most countries have been funded by government budgets and public insurance systems. In China, Indonesia, Malaysia, Mongolia, and Vietnam, for example, government budgets were used for both regular and emergency purposes. In Timor-Leste, funding from the Petroleum Fund (a national wealth fund used for emergency purposes) was used for an extraordinary transfer to the state budget to fund COVID-19 health services. Indonesia earmarked a national emergency stimulus package to tackle the COVID-19 outbreak for health care spending. Conversely, resources from (public) health insurance systems have played a critical role, such as the Universal Coverage Scheme in Thailand, the National Health Insurance (NHI) system in the Republic of Korea, the National Health Insurance Program of the Philippines, and the Pradhan Mantri Jan Arogya Yojana (PM-JAY) in India (Tsilaajav et al., 2020).

During the COVID-19 pandemic, co-payments for the test and treatment associated with a pandemic need to be reduced or exempted, if any. Australia, Cambodia, China, Japan, the Republic of Korea, Malaysia and Singapore (in the public sector), Mongolia, the Philippines, the Lao People’s Democratic Republic, Thailand, and Vietnam provide testing and treatment of COVID-19 free of charge. In China, all drugs and services (including tests) in the National Health Commission guideline for the diagnosis and treatment of COVID-19 are reimbursed and all costs of comorbidities treatment and follow-up visits for COVID-19 patients are also covered. According to the Public Health Ministry announcement in Thailand, all hospitals, public and private, may not charge patients but can bill the National Health Security Office (NHSO) later (Tsilaajav et al., 2020). In Bhutan, private hotels and businesses have provided their services free of charge to the government to be used as quarantine facilities.

### 3.3.2 Payment system for providers

Quick and flexible purchasing in times of a pandemic includes making available additional public resources to front-line service providers in a timely manner. Resilient health systems have quickly adjusted PFM rules and procedures as well as fiscal arrangements, including advance payments or direct budget transfers, that aimed at accelerating the release of funds to providers have been implemented. The public insurance systems in Thailand and Indonesia used standard claim-based disbursement arrangements; advance payments to providers were used in the PhilHealth in the Philippines. The Philippine Health Insurance Corporation, or PhilHealth, under the interim reimbursement mechanism released funds paid to health care facilities equivalent to 3 months’ worth of claims based on historical data, which will be accounted for in the future claims (PhilHealth, 2020).

A mix of payment methods for COVID-19-related services was used by purchasers and payers to offer service delivery alternatives. Fee for services (FFS) seem to be the most commonly used payment method, particularly, for testing, consultation, and ambulance services. For hospital care that is more complex, many different payment methods have been applied such as case-based payment, line-item budgets, FFS and per diem payment. Resilient strategic purchasing also needs to consider the risk of
fluctuating demand that provides face under different types of payment systems during the pandemic, for example, high risk of decreased demand under FFS. Moreover, purchasing also needs to be flexible with adequate incentives to purchase emerging and new types of services, including telemedicine and online consultation and health care by private providers. In Thailand, the Ministry of Public Health introduced telemedicine services to mitigate the potential risk of COVID-19 infection in health care facilities, which are paid on the basis of a fee schedule (Tsilaajav et al., 2020).

As countries have imposed restrictions on nonurgent services to free up hospitals for COVID-19 patients, patterns of health care utilization, especially non-COVID-19 essential services can be significantly changed. Although this is necessary in the short term, this has affected providers who rely on volume-based payment methods such as FFS, suffering cash-flow problems (Thomas et al., 2020). Temporary compensation for providers for unexpected changes in cash flow is needed to enable smooth, effective adaptation. Pandemic preparedness may need a risk sharing mechanism between payers and providers to maintain access to essential services during pandemics as well as surge capacity where necessary. The role of different payment systems for providers in a pandemic crisis depends on contexts, but capitation can better withstand the decline in demand while FFS is very sensitive to changes in demand and exposes providers to high risks, similar for DRGs.

3.3.3 Purchasing arrangement for private providers

Countries in Asia and the Pacific show considerable variation in private sector participation in service delivery. Regardless of the income level, the private sector has played a significant role in service delivery. In some countries, the private sector accounts for the majority of health service providers, including Republic of Korea, Japan, the Philippines, Cambodia, India, Indonesia, and Bangladesh. In other countries, such as Vietnam, China, and the Lao People’s Democratic Republic (Lao PDR), the private sector has recently been growing in the health sector (Cowley & Chu, 2019). However, countries such as Thailand, Bhutan, Timor-Leste, Sri Lanka, and the Pacific Island countries largely depend on public providers (Tsilaajav et al., 2020, June 29, 2020).

A surge of patients during a pandemic requires mobilizing many health providers for a whole-of-country approach. Based on quality and performance, having in place a contracting system for private providers would be an important element of pandemic preparedness. Incentive and payment systems for private (and public) providers as well as legislation, accreditation, and regulation for the quality of health care providers constitute pandemic preparedness as well as improve overall performance of health care delivery with synergies and the uniform policy framework. A country can introduce a law to allow a mandatory mobilization of private providers in a health emergency related to a pandemic. A PFM system needs to include contracting arrangements with private providers during a pandemic if such rules are not in place. The role of the private sector is also important to rapidly expand the supply of PPE, diagnostics, and medicines.
In the first few months into the pandemic, many governments heavily depended on public providers to provide COVID-19-related health services. Several countries have first investigated the public-sector readiness and gaps with respect to the required services, including COVID-19 testing, ICU beds and ventilators, hospital case monitoring and home care, and made decisions to integrate the private sector. Some countries, like the Philippines, India, Nepal and Thailand, made it mandatory that all designated private hospitals treat COVID-19 patients based on their capacity when and where required. By June 2020, private providers in most countries in Asia and the Pacific had already been mobilized to support the COVID-19 response actions to some extent, including testing (in health facilities and laboratories), consultations, dispensing of outpatient medicines, ICU care, hospital admissions, and quarantine and self-isolation measures (Tsilajav et al., 2020, June 29, 2020). In addition, the private sector has participated in response to COVID-19 as the main producer and supplier of essential medical products, including drugs, ventilators, and PPE.

Relationships between the purchaser and providers vary depending on a country’s health financing systems. In some countries, the Ministry of Health (MoH) also served as the purchaser of private health services, including Cambodia, Vietnam, Lao PDR, Mongolia, Sri Lanka, Nepal, Bangladesh, and Timor-Leste. In other countries, public health insurance agencies has been the purchaser from both public and private providers, such as the Thailand’s NHSO, NHIS in the Republic of Korea, PhilHealth in the Philippines, Indonesia’s Badan Penyelenggara Jaminan Sosial (BPJS), and the PM-JAY in India. For patients that are not covered by PM-JAY, the Ministry of Health and Family Welfare purchases COVID-19-related health services in India (Tsilajav et al., 2020, June 29, 2020).

Most countries have resorted to more straightforward and faster processes of selecting private providers than before and approved lists of private health facilities for COVID-19. In Thailand, the Ministry of Public Health issued lists of qualified testing laboratories and approved hospitals for COVID-19 care. In Indonesia, the BPJS certifies private hospitals based on a set of criteria suggested by the MoH. In Thailand and Indonesia, the hospital capacity in terms of the number of ICU beds, ventilators, and health workers has been used as selection criteria. In other countries, such as Nepal, the criterion is more straightforward, and all designated private facilities licensed as tertiary level hospitals are allowed to treat COVID-19 patients. In the Philippines, admission to accredited or nonaccredited private facilities are allowed as long as they are licensed or certified by the Departments of Health, and treatment and management allowed by accredited or nonaccredited health care professionals who are duly licensed by the Professional Regulations Commission. In India, the state health authorities within the PM-JAY have the flexibility to select the criteria of empanelment based on their specific situation (Tsilajav et al., 2020, June 29, 2020).

Governments have mobilized private sector providers through higher provider payments or legislations/mandates. Payment rates for private providers have been adjusted to generate incentives for more accessible COVID-19 services (e.g. Bangladesh, India, Korea, and Japan). Private providers in some countries indicated some reluctance to
provide ICU services for COVID-19 patients at the existing payment rates. In Bangladesh, private facilities had to hire consultants and other health workers at seven to eight times higher rates because health personnel were reluctant to provide COVID-19 services. Therefore, the tariffs for services need to be aligned along with the existing payment level, with the possibility to increase them in order to incentivize health providers. In India, payment rates for COVID-19-related services were upwardly adjusted considering the increased costs. In Korea, the National Health Insurance substantially increased the fee for ICU care to encourage (private) hospitals to join the treatment of severe COVID-19 patients. Moreover, as of December 2020, the Korean government had proposed that if private health facilities participate in or apply for the COVID-19 treatment centers, the government would provide them with 5 billion KRW (4.4 million USD) per 300 beds criteria. In Japan, provider payments for treating critically ill patient in the ICU have tripled since May 2020. In December 2020, the government started providing up to US$142,000 per bed to secure beds for COVID-19 patients; however, these financial incentives did not seem to be sufficient to secure beds for COVID-19 patients as less than 1% of all beds are available for COVID-19 patients.

Taking the command and control approach, countries can introduce legislation that mandates providers to accept COVID-19 patients. However, it is likely that determining the amount and duration of compensation for private providers is not easy, as the impact and length of the pandemic is unpredictable. In Thailand, all public and private hospitals were required to report daily PPE supplies and unoccupied ICU beds during the early stages of the peak of COVID-19; moreover, based on a national consultation process led by the MoH, all private hospitals with appropriate capacities of treating COVID-19 are required to take COVID-19 cases if demand in public facilities exceeds a predetermined threshold (O’Hanlon & Raman, 2020, June 2020).

3.4 Service delivery innovations in improving access to care

3.4.1 Efficient service delivery

Pandemic preparedness calls for special wards and hospitals for the treatment of patients, and the health system requires flexibility in infrastructure, logistics, and human resources to respond to a pandemic situation. Primary care needs to play a key role in prevention, detection, treatment, referrals, so on, and can also help ensure access to essential services (WHO, 2020b, June 1, 2020). During the COVID-19 response, majorities of COVID-19 patients are mild cases and need not be hospitalized. Setting up a patient triage system and sending mild patients to nonhospital facilities, including home care and social care institutions, can make hospital beds available for patients with severe and critical illness (e.g. Japan and Korea), and the coordinated continuum of care can reduce mortality. Treatment pathways are needed, and separate paths for respiratory patients, especially for the outpatient care, can also minimize the potential infection in health facilities.
3.4.2 Digital health

The role of digital health has increased in a pandemic crisis. Social distancing or lockdowns are barriers to health care access, and health care providers also worry about potential infection by a patient visit. Digital health has shown to enhance access to health care during a pandemic in many countries (e.g. China, Korea, and Australia). For digital health to succeed, adequate payments and incentives for both providers and patients, as well as a system to ensure quality, safety and privacy, should be considered.

Moreover, using technologies and monitoring systems in service delivery has been critical to quickly and efficiently respond to COVID-19. As all people and health providers are required to participate in the NHI system in the Republic of Korea, Health Insurance Review and Assessment (HIRA) under the NHI system produces health-related big data, available to the public, health providers, and the government. HIRA can track all resources, including test kits, vacancies in negative pressure wards, supplies of medicines, and the number of health providers and pharmacies available at the central and local levels on a real time basis. HIRA developed a monitoring system for tracking buyers’ purchasing records to monitor the distribution of masks (Salmon, 2020, June 15, 2020).

3.5 Promoting cooperation among all levels of governments

Effective leadership should be able to show that investment in the health system is paramount in the face of health emergencies by demonstrating the capability of preventing, detecting or coping with a public health emergency, so that the whole of society, such as the economy, transport, education, and tourism, may benefit from it (Thomas et al., 2020). Multisectoral cooperation among the public and private sectors, central and local governments, and across various ministries in the government has played an important role in dealing with crises like COVID-19 and achieving UHC. Since the COVID-19 pandemic is far beyond the health sector, effective cooperation across ministries, particularly among the Ministry of Finance and the MoH, is a key to strengthening health security and health system capacity during the COVID-19 pandemic and preparedness for the future.

Multisectoral cooperation between central and local governments is critical for rapidly and effectively responding to health emergency like COVID-19, allocating human and physical resources, and funding at the national and subnational levels and across levels of care. National emergency operation centers consisting of representatives from all key ministries and sectors in the central government have been established in countries to coordinate COVID-19 preparedness and response actions from the very beginning (Thomas et al., 2020). Governance of local governments is critical in bridging the gap between central policy measures and local realities for coordinated responses to COVID-19. Evidence from Kerala in India shows how long-term support from the central government for local governments has improved public trust and cooperation with government bodies, while local governments incorporate an ethic of care in implementing the central policy measures, leading to effective response to COVID-19 (Dutta & Fischer, 2021).
4. Key Lessons Learned

The COVID-19 pandemic has exposed the intrinsic value of health and the resilience of the health sector, the importance of the sufficient investment in health, and the interconnectedness of health and the economy. Countries that had ingrained pandemic preparedness in their resilient health systems were able to better deal with the pandemic as well as to provide access to essential services and continuum of care, including key public health functions, without financial barriers. Investment into strengthening health systems is a fundamental solution for pandemic preparedness and response. COVID-19 can create an opportunity to transform the existing financing and service delivery by increasing efficiency, prioritization, quality, and access for the poor while improving health security and economic reconstruction.

A very effective strategy to cope with a pandemic is to have the capacity of preparedness and early response so that rapid infection is controlled, that is, the epidemiological curve is flattened, and health system can still function without being overwhelmed by the overflow of severe patients (Sparkes et al., 2019). Multisectoral cooperation is critical. In a health emergency like COVID-19, leadership and technical authority by the central government can quickly increase the response capacity of a country. Trust, awareness, and participation of the public are all vital to build a resilient system for infectious disease prevention and control. Transparency, communication, and community engagement also contribute to an effective multisectoral approach to cope with a health crisis.

In an effective response to a pandemic, resilience and adaptability of service delivery and financing is critical in terms of payment methods/rates, incentives, upfront payment, contracting, and risk-sharing mechanisms. Government budget or PFM needs to be flexible as well as accountable to mobilize financial resources and increase spending to the health sector during a health emergency. Government’s willingness and capacity to rapidly and effectively make a prioritization decision and allocate human and physical resources across different levels of care and different regions is also crucial.

The role of innovations in service delivery through digital health would be also important to maintain or improve access to essential health services and minimize potential excess mortality from non-COVID-19 health problems. Countries also need to introduce a purchasing mechanism and regulation to make sure that private providers contribute to a nation’s health in a health emergency. As robust pandemic preparedness entails all stakeholders, including employers, nongovernmental organizations, the health and other sectors under clear governance structures, and legal framework, health financing and service delivery need to have such plans and arrangement integrated in their operations and aligned in the financing arrangement, contracting relationship, regulatory framework, and training of human resources.

UHC guarantees no one is left behind. Governments will have to pay close attention to the protection of vulnerable populations, such as the elderly, those with existing conditions and the poor, who suffer much more than others from a pandemic. The poor, migrant workers, and those who live in vulnerable environments, such as urban slums, need to be better protected because they already have worse health conditions,
have limited access to health protection, and face more barriers to practice personal hygiene and social distancing. A targeted approach to protect the poor, the elderly and those with preexisting medical conditions is more efficient, because once the most vulnerable group is protected, young and middle-aged groups, who have lower fatality, can join economic activity more quickly. In addition, health measures need to be accompanied with other social assistance measures to provide more effective protection for the vulnerable.

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