ASIA PACIFIC PANDEMIC PREPAREDNESS AND RESPONSE REGIONAL FORUM

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Ministry of Economy and Finance

HEALTH FINANCING DURING COVID-19

Taejin Lee

Professor
Seoul National University Graduate School of Public Health

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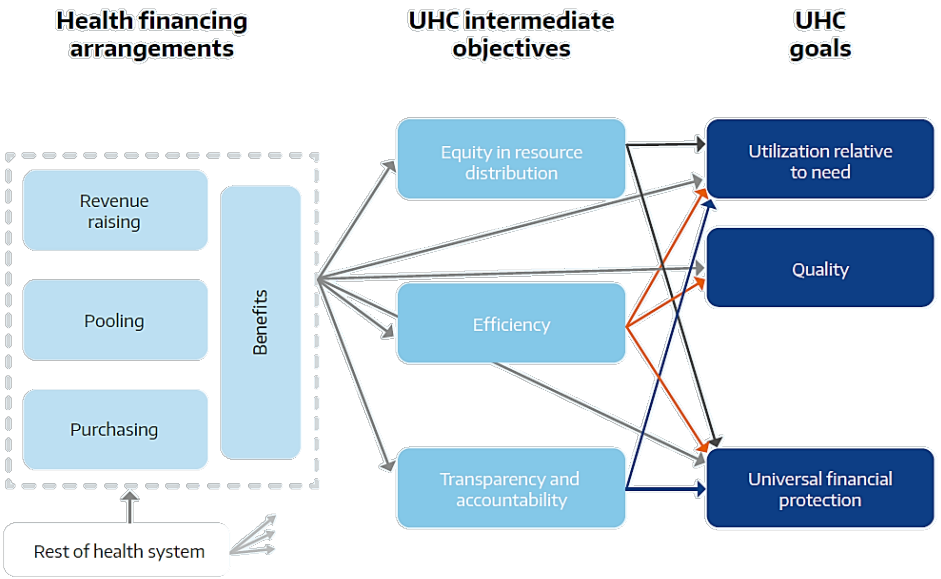
What can financing schemes and provider payments do to improve pandemic response?

COVID-19 pandemic and its impacts (1)

- Pandemic crisis had several common and distinct characteristics from past economic crises
  - e.g., the 1997 Asian financial crisis and the 2008 global financial crisis
- Negative impacts on population health and health inequality
  - Hospitals as a place of treatment and a source of infection
  - Increased number of long COVID patients and death tolls as a primary outcome
  - Exacerbated excess mortality and reduced life expectancies regardless of income level
- Negative impacts on socioeconomic aspects
  - Priority shift in policy measures to infection control (i.e., travel restrictions, quarantine, and lockdown)
  - Economic slowdown and rises in unemployment and poverty rates as a secondary outcome

COVID-19 pandemic and its impacts (2)

- Even during the COVID-19 pandemic,
  - patients should have used healthcare services relative to needs
  - patients should have had no financial hardship to access and receive healthcare services
  - the healthcare system should have guaranteed Quality Care



Source: Kutzin, J., Witter, S., Jowett, M., Bayarsaikhan, D., & World Health Organization. (2017). Developing a national health financing strategy: a reference guide. World Health Organization.

COVID-19 pandemic and its implications for health financing

- At a macro level it can cause tight health financing and may slow down the progress of Universal Health Coverage (UHC)
  - Policy measures (i.e., travel restrictions, quarantine, and lockdown) implemented in response to COVID-19 attributed to reduced income, and the consequent **decrease in government tax revenue or insurance contributions**
- At a micro level it is necessary to compensate for income loss and extra expenses of clinics and hospitals
  - Medical providers experienced **income loss** due to consumers' fear of visiting health facilities, while an increased number of COVID-19 patients caused **extra expenses** to medical providers

Policy note on health financing during COVID-19

- Aims to examine
  - how countries have funded health sectors in response to the COVID-19 pandemic
  - what kinds of provider payment measures have been used to compensate for income loss and extra expenses
- Six countries (Ghana, Indonesia, Japan, Korea, Thailand, and the UK) were included considering the region, income level, and health financing mechanism
- A substantial data gap remained as how governments and providers dealt with changes in resource allocation and payment systems were left unknown or confidential

Health financing arrangements in six countries (1)

- Before the pandemic, health outcomes and medical expenditure tended to be proportional to the size of a country's economy represented by GDP
- Health financing arrangements vary by country because:
    1) The mix of financial resources varies depending on financing scheme and population coverage
    2) Provider payment systems have been blended by historical and contemporary payment reforms

Source: Kutzin, J., Witter, S., Jowett, M., Bayarsaikhan, D., & World Health Organization. (2017). Developing a national health financing strategy: a reference guide. World Health Organization.

Health financing arrangements in six countries (2)

	Ghana	Indonesia	Japan	South Korea	Thailand	United Kingdom
Total population (thousands)	30,418	270,626	126,860	51,225	69,626	67,530
Life expectancy at birth (years)	66.3	71.3	84.3	83.3	77.7	81.4
Population aged 65 and above (% of total population)	3.1	6.1	28	15.1	12.4	18.5
GDP (USD billions)	67	1,119.20	5,081.80	1,646.70	543.5	2,829.10
Total Current Health Expenditure (USD millions, % of GDP)	2,319 (3.5)	29,893 (2.9)	542,719 (11.0)	130,120 (7.6)	19,156 (3.8)	285,999 (10.0)
by government (%)	33.5	25.4	8.4	10.1	67.8	77.8
by compulsory health insurance (%)	11.4	24.6	75.7	49.8	11.4	0
by voluntary payment schemes (%)	17.5	15.6	3.2	7.6	9.6	5.5
by out-of-pocket payment (%)	37.7	34.4	12.7	32.5	11.0	16.7

Source: World Bank DB, WHO Global Observatory Database, WHO Global Health Expenditure Database

Health financing arrangements in six countries (3)

	Ghana	Indonesia	Japan	South Korea	Thailand	United Kingdom
Primary health financing scheme	National Health Insurance Scheme	National Health Insurance (JKN)	Health Insurance (multiple payers)	National Health Insurance (single payer)	Subsidy- and contribution-based multiple payers	National Health Service (NHS)
Dominant provider payment system	Ghana Diagnostic-Related Groups (G-DRGs)	Fee-for-service (FFS), Diagnosis-related-group (DRG)	Fee-for-service (FFS), Diagnosis Procedure Combination (DPC)	Fee-for-service (FFS)	FFS, Capitation, Thai-Diagnosis-related-group (DRG)	Capitation, Block contracts

Source: World Bank DB, WHO Global Observatory Database, WHO Global Health Expenditure Database

How have countries funded health sectors in response to the COVID-19 pandemic? (1)

- Advanced economies deployed a series of fiscal stimulus packages to minimize socioeconomic impacts by increasing public spending on health, liquidity support, cash transfer, or social welfare payments to rouse economic activity (Makin and Layton 2021)
  - It was unlike the past experiences during other economic crises, where governments responded with long-term austerity, structural adjustment, and cost-containment measures
- On the global average, 10 % of the GDP was spent in response to the pandemic crisis from January 2020 to September 2021 (IMF 2021)
  - Government in six countries increased revenue by collecting a supplementary budget, raising public debt, or cutting taxes for households and businesses
  - The Thai government further pooled 10% of ministries' budget to redistribute and utilized in-kind donations and government loans to raise financial capacity from early 2020 (Sachdev et al. 2022)

How have countries funded health sectors in response to the COVID-19 pandemic? (2)

- Despite the rise in the total budget, solid policy priority showed in mitigating socio-economic damage

- Healthcare systems should fulfill the mission of testing, diagnosing, treating, and rehabilitating COVID-19 or non-COVID-19 patients with the rest of the budget allocated

Six countries' additional budget in response to the COVID-19 pandemic

	Total Additional Budget (USD Billion, % of GDP)	Sectoral Budget (USD Billion, %)		Percent of GDP (%)	
		Health	Non-Health	Health	Non-health
Global	10,793 (10.2)	**1,451 (13.4)**	9,255 (85.8)	1.4	8.6
Japan	844 (16.7)	**105 (12.4)**	739 (87.6)	2.1	14.6
United Kingdom	522 (19.3)	**131 (25.1)**	391 (74.9)	4.8	14.4
Republic of Korea	105 (6.4)	**12 (11.4)**	93 (88.6)	0.7	5.7
Indonesia	99 (9.3)	**22 (22.2)**	77 (77.8)	2.0	7.3
Thailand	73.2 (14.6)	**N/A**	N/A	N/A	N/A
Ghana	2.2 (3.3)	**0.8 (33.6)**	1.5 (66.4)	1.1	2.2

Note: The data includes additional spending or foregone revenues and COVID-19-related measures from January 2020 to September 2021.
Source: IMF. (Oct 2021). Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic. Retrieved from https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19

How have countries funded health sectors in response to the COVID-19 pandemic? (1)

- The UK had relatively a large spending in the health sector, 25.1% of additional budget, equivalent to 4.8% of GDP
  - The NHS solely needed to prevent, treat and trace the suspected or diagnosed patients, apart from reflecting the low funding growth over a decade prior to the pandemic
- Japan and Korea spent a relatively low proportion (12.4% and 11.4%, respectively) of additional budget in the health sector
  - Japan's additional budget was about eight times larger than that of Korea.
  - Korea had most costs of tests, treatments, and vaccinations covered by NHI, so a lower share of additional funding, equivalent to 0.7% of GDP, was allocated to health sector

How have countries funded health sectors in response to the COVID-19 pandemic? (2)

- Indonesia and Ghana allocated 22.2% and 33.6% of the total additional budget to the health sector in response to the COVID-19 pandemic, respectively
  - Indonesia earmarked a substantial amount in the health sector, resulting in a budget equivalent to 2% of GDP (Kwon and Kim 2022)
  - Ghana initiated the Coronavirus Alleviation Programme (CAP) in May 2020 for large-scale construction of hospitals

What kinds of provider payment measures have been used for income loss and extra expenses during COVID-19? (1)

- The pandemic caused unexpected losses and expenses due to sudden changes in patient flows across departments and regions
  - **Income loss**: reductions in utilization of health services for patients having non-COVID-19 illnesses or for those having a fear of being infected
  - **Extra expenses**: clinics and hospitals needed to treat an increased number of patients who were vulnerable, suspected, or diagnosed with COVID-19

What kinds of provider payment measures have been used for income loss and extra expenses during COVID-19? (2)

- Most measures implemented in an ad hoc fashion as a tentative means, were influenced by countries' existing payment systems
- Past experiences including the institutionalization of infection control system, existing payment methods, and the bargaining power of providers greatly influenced the decision-making process and its outcome regarding the payment's goal, means, and extent

	Before COVID-19	Income Loss	Extra expenses	Medical Acessability
Global Budget or salary	Ghana, United Kingdom	United Kingdom		
Capitation	United Kingdom			
Fee-for-service payment	Republic of Korea		Japan, Republic of Korea	Japan, Republic of Korea, United Kingdom
DRG-based payment	Thailand, Japan	Thailand	Thailand	
Compensation for overhead costs including supplies, equipment, and utilities			Ghana, Indonesia, Thailand, United Kigndom	
Compensation based on the previous year's turnover or income threshold		Republic of Korea, United Kingdom		
Cash- or in-kind benefits for patient				Ghana, Indonesia, Republic of Korea

What kinds of provider payment measures have been used for income loss and extra expenses during COVID-19? (3)

- In the UK,
  - NHS offered **block contract** for all NHS trusts and foundation trusts with local variation adjustment (NHS 2020)
  - GPs or specialists used to receive salaries or capitation payments, which served as safety nets. During the pandemic, afterhours were paid with **higher payment rates** (Waitzberg et al. 2021). GPs were also compensated based on the **previous year's turnover** instead of contact capitation combined with some FFS payments
  - Funding arrangement for public hospitals were also changed from activity-based payment scheme to block contract since April 2020, which aimed to **simplify and alleviate administrative burden**, provide sufficient funding for workforce, and ensure service delivery in response to COVID-19 (NHS 2020)

What kinds of provider payment measures have been used for income loss and extra expenses during COVID-19? (4)

- In South Korea,
  - Two post-auditing payment methods were implemented: **a pre-payment method** in which 90-100% of the average monthly reimbursement of the previous year was paid in advance, and an **early payment method** in which 90% of the claimed payment was reimbursed per se before the claim review was settled
  - Government budget or NHI supported compensation for securing hospital beds, income loss by decreased non-COVID-19 patients, income loss due to temporary closures, and excess expenses for disinfection procedures
  - Government intermittently mandated private hospitals with an admission of severe COVID-19 patients at isolated or ICU beds due to variants surge, and **adjusted reimbursement rates** to encourage providers' participation

What kinds of provider payment measures have been used for income loss and extra expenses during COVID-19? (5)

- In South Korea,
  - **ICU beds for COVID-19 patients** would be reimbursed five times, if not used, or ten times, if used, compared to the existing fee per day
  - While all vaccines were purchased with the government budget, a **matching fund reimbursed private providers' service fee** (₩19,220, equivalent to about $18) per vaccinated patient: 30% by the central government and 70% by NHI in 2021; 30-50% by central government and the rest by local governments in 2022
  - **Telemedicine** was allowed temporarily to lower the possibility of getting infected and the medical providers were reimbursed at 30% higher than usual fee levels

Fee-For-Service payment in response to the COVID-19 pandemic (Jan 2020 – Jun 2022)

Type	Subtypes	Amount (Billion KRW)	Amount (Million USD)
Infection Control and Prevention	• For infection control related to COVID-19 • For long-term-care hospitals • For mental health hospitals	8.8 214.5 40.2	8.0 195.0 36.5
Testing COVID-19	• Using a PCR test kit • Using a Rapid antigen test kit • Using a PCR test kit for influenza and SARS-CoV-2	1,531.2 807.3 4.1	1,392 733.9 3.7
Treatment	• Admission and Treatment for severe patients diagnosed with COVID-19 • Treatment of mild patients diagnosed with COVID-19 1) At a Community Treatment Center 2) By Telemedicine (Home treatment) 3) For In-person care • Emergency Care to prepare and respond to COVID-19 patients	1,284.8 149.8 1,363.2 81.8 92.4	1,168 136.2 1,239.3 74.4 84.0
Non-COVID-19 Care	• For telemedicine • For National Relief Hospitals • For Designated Clinics for Respiratory Infection • For surgery and childbirth of COVID-19 patients • For hemodialysis	102.7 136.1 167.5 2.5 13.3	93.4 123.7 152.3 2.3 12.1
Workforce	• For nursing management at night • Incentive for COVID-19 response healthcare workforce	43.9 140.1	39.9 127.4
Others	• COVID-19-Diagnosis prescription fee • COVID-19 vaccination service fee	59.8 858.8	54.4 780.7
Total		**7,102.8**	**6,457.1**

Policy implications and Lessons learned

- Three key messages learned from country cases of how to use provider payment system to compensate for income loss or extra expenses against the pandemic
    1. Governments should allocate additional budget to the health sector in response to the health crisis such as the COVID-19 pandemic
    2. Social health insurance scheme could contribute to governments distributing more of tax revenue to the non-health sector during the COVID-19 pandemic
    3. A mixed payment system can boost surge capacity in the healthcare system and provide incentives for medical providers

Thank You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