Health financing in times of COVID-19: Adaptative measures by countries, implications for future financing and lessons for others

A P4H global learning event amongst P4H partners offered to its members

Questions from the participants and answers from the presenters

When: 29 April 2020, 8:00 – 9:30 am (EST)

How: Webex – 240 participants from five continents joined.

Chair: Irina Nikolic, Senior health advisor at the World Bank, Steering Group member of P4H

Facilitator: Jean-Olivier Schmidt, Coordination Desk P4H

Discussants: Eduardo Banzon (ADB, Manila), Lou Tessier (ILO, Geneva), Peter Cowley (WHO Western Pacific Office)

Questions to Prof Soonman Kwon, University of the School of Public Health, Seoul National University

(1) What is the maximum co-payment of the patient? What does that mean in term of adaptation/change in the national health system meet the demand?

- 20% copayment rate for inpatient and 20-50% for outpatient care, but copayment is exempt for COVID patients because it is paid by government (budget)

(2) How much is the advance payment of NHI to hospitals?

- Fixed % of estimated cost. Sorry I do not have data yet about the %.

(3) Did the NHI pay for the full cost of hospitalization?

- NHI pays for NHI part, copayment is paid by government

(4) Was the government taking care of the cost for those in quarantine?

- Yes, government pays for some portion of income loss based on formula

(5) Did the private sector also conduct the testing? Who catered for the cost in this case?

- There is no cost difference between public and private providers. In Korea all private providers should join NHI by law (mandate) with no opting-out

(6) **How is NHI in Korea financed, and did it receive additional funds for financing all the COVID-19 tests and treatments/hospitalizations? If so, funds from which source?**

- NHI funded by contribution (with small amount of government subsidy). No additional fund by government for NHI, except for funding for copayment, so far.

(7) Role of private sector at all in SK? Was there a key role for civil Society in the Korean response?

- There is no cost difference between public and private. In Korea all private providers should join NHI by law (mandate) with no opting-out. Some voluntary workers and health personnel from civil societies provide services.

(8) What was the resource gap in South Korea and how it was filled in using various sources?

- As government successfully flatten the curve, we did not experience a big resource gap fortunately. When the economy is not good as expected, it will decrease the revenue (contribution) to NHI.

(9) The Korean experience is quite interesting. But most of the interventions might not work in poor countries like Sierra Leone. So what is the recommendation?

- Good legal/policy framework for rapid response, e.g., contact tracing, coordination among central and local government, flexibility in PFM, etc.

(10) Did the high supply of beds contribute to any inappropriate use of hospital-based care for treating Covid-19 cases. For example, were less severe cases treated on an inpatient basis when they could have been appropriately (and more inexpensively) treated at an ambulatory level?

- We do not have evidence. High supply may helped avoid the shortage of beds in a health emergency. No evidence so far on unnecessary hospitalization (COVID-10 patients do not provide high profit (relative to other patients) to hospitals) so I do not worry about the unnecessary hospitalization.

(11) How were the other diseases and prevention programs handled during lockdown Ex; MCH, UIP, TB , Cancer services etc

- There was no lockdown in Korea. But some patients were reluctant to visit health facilities.

(12) What do you know so far about the impact of COVID-19 on the health sector budget in Korea for the next 2-5 years? Are there any initial projections?

- No projection so far. The majority of health funding comes from NHI. When the economy is not good as expected, it will decrease the revenue (contribution) to NHI.

(13) What are the lessons learned to mobilize sufficient supplies timely for PPE and testing materials, as these are big challenges facing many countries, rich and poor.

- After the MERS experience 5 years ago, Korea has had relatively good stock of them. But it was not enough and government imported some of them and rationed face mask through pharmacy.

Prof Yingyao Chen, Fudan University (P4H Member)

(1) Any specific reason for such huge difference between Wuhan and other regions in CFR?

The statistical data demonstrate big difference between Wuhan and other regions. There are several reasons:

- Due to the widespread community transmission in Wuhan, the proportion of patients over 80 years old accounted for 5%, while the national (including Wuhan) proportion was only 3.2%. This is because the early detection and isolation of areas outside Wuhan had effectively controlled the spread of the epidemic from the middle-aged and young people with greater mobility and social activities to the elderly.
- In areas outside Wuhan, Wuhan ’s lockdown had secured a valuable window for prevention and control in other areas. All localities were actively carrying out prevention and control work, and the broad masses of people had greatly reduced their outing activities,

effectively controlled the rise in the number of infected people, avoided overload of medical resources. And other regions had achieved early detection and early treatment, the mortality rate was relatively low.

- In the early days of the outbreak in Wuhan, the number of patients increased sharply, and medical resources were extremely tight to response huge health demands. In addition, because the epidemic first broke out in Wuhan, medical staff did not have good understanding of this emerging disease, and the formulation of related diagnosis and treatment plans also need to be explored from scratch, which will also affect the effectiveness of treatment.

(2) The case fatality risk was relatively much higher in Wuhan. What were the reasons for this?
Similar to the first question.

(3) In China, was any financial support been provided to companies/individuals to pay for lost production and salaries?
It is a big question. Basically, the government encouraged companies to offer individuals normal salaries, including extending the spring festival holiday with pay, working home with same salaries, hospital stay with COVID-19 with normal pay, etc. More policies could be explored at government websites.

Policy measures for enterprises were granted as follows:

- Financial support, granting financial discounts to loans for key epidemic prevention and control enterprises; optimizing the financing guarantee services for enterprises affected by the epidemic; central fiscal discount funds to support key epidemic prevention and control enterprises; during the epidemic prevention and control period, the central government will arrange funds for Chinese and foreign air transport companies provide support; issue relevant specific policies to promote the resolution of financing problems for agricultural business entities and mitigate the impact of the epidemic on agricultural business entities.
- Tax incentives
  - For key protection enterprises for epidemic prevention and control, and for enterprises in the transportation, catering, accommodation, tourism and other industries that are greatly affected by the epidemic, measures are provided to support individual industrial and commercial households and small and micro enterprises to resume work and resume business, and phase out the reduction of corporate social insurance fees. Tax preferential policies have been introduced; enterprises that have serious difficulties in production and operation due to the epidemic situation can apply for the deferral of social insurance premiums, reduce the payment of employees 'basic medical insurance units in stages, and provide housing provident funds in stages.

(4) Outbreak started in December and fund allocation made in March. Just a clarification was professor referring cumulative funding till March or was it allocated in March for the first time?
Yes, accumulated funds from the outbreak to March.

(5) Are all these hospitals involved in Hubei mainly public or both?

Both. Most of them were public hospitals, and some private hospitals were used as designated hospitals for the treatment of fever patients. Of the 28 tertiary Class A hospitals in Wuhan, 3 non-public hospitals, in which two of them were converted from state-owned enterprises. In addition to large hospitals, private small hospitals in Wuhan also played a role. Outside Hubei, group-type private medical institutions were also delivering support.

(6) How did China make sure that other basic health services (eg maternal and child care) were not sidelined / cannibalized by COVID-19?

For pregnant women, emergency surgery patients, patients with acute cardiovascular and cerebrovascular diseases, hemodialysis patients, and patients with malignant tumors, various types of medical institutions should focus on ensuring their medical needs, and formulate targeted diagnosis and treatment procedures and emergency plans according to local conditions. For patients in emergency department who cannot rule out new coronavirus infections, they can be treated and protected according to the suspected patients to ensure the safety of patients and medical staff. For patients with chronic diseases in outpatient clinics, in addition to prolonging the dosage of prescriptions depending on the condition, hospitals are encouraged to carry out online consultations and follow-up, medical institutions are encouraged to carry out online consultation and medical guidance, and the supply of medicines is guaranteed.

(7) Ratio of doctors to nurses was around 1:2.5; what was the ratio of nurses to patients / population?

1.2.5 was the proportion of doctors and nurses supporting Hubei across the country. The number of doctors, nurses, and patients was a dynamic process.

As of the end of 2018, the permanent population of Hubei Province was 60 million. 3.7 nurses per 1,000 population.

(8) Was there significant private sector involvement - in terms of service provision, financing etc? It would be interesting to hear more about this?

Private sector did cash donations, donated materials needed to fight the epidemic. Donations in kind were mainly medical supplies, equipment, etc. Private enterprises have played an important role in ensuring the production and supply of protective materials, participating in the treatment of patients, and organizing the resumption of labor and production.

For private hospitals, they played part of roles but not the main force. In general, private hospitals provided about 10-15% of outpatient visits and inpatient services in China in recent years, and public hospitals are main services providers.

(9) What was the "pre-hospital" assessment in this case- is this done in the community?

The pre-hospital evaluation is aimed at severe and critically ill patients. The referral to the intensive care hospital should be confirmed or in line with the clinical diagnosis of severe, critically ill patients, and patients with high-risk factors. The referral institution should evaluate the condition before referral.

(10) What was strategy followed for easing the lockdown specifically in WUHAN and lesson learned on de-confinement?

Some of the main public health measures include: recruiting volunteers and coordinating the normalized prevention and control interventions; scientific linkage and joint prevention and management of city entrances and exits to implement health codes; implementation of epidemic prevention and control measures in public places; taking masks and keep social distancing, etc.

The complexity of the epidemic still exists, and we should continue to monitor and analyze its epidemic trend. When the pandemic risk going down, the main challenges shifts to balance of disease control and normal socio-economic activities. Awareness of pandemic and corresponding health behavior should be more important.

(11) Did you think decentralization helped or hampered the COVID-19 response in China?

I think China's approach is actually an efficient epidemic response and joint prevention and control mechanism, a scientific, multi-layered, and systematic mechanism, which the central government makes overall plans and provides guidance, and the provincial government dynamically takes measures according to the actual epidemic situation.

(12) How did Wuhan/China address the deprivation and hunger for informal sector families during the lockdown?

Mainly community/village level organization and volunteers helped the vulnerable people and families to access to food and basic needs. In Wuhan, food, vegetables, fruits, and other living goods were uniformly distributed by community workers or volunteers to fulfil the living needs of residents, especially for the vulnerable people, even free for them.

(13) The WHO fact finding mission to China had mentioned that quite a lot of medical visits had been moved to telemedicine- is it possible to elaborate on this role in maintaining essential health services?

During the epidemic, we combined existing hospitals and telemedicine systems and other resources to encourage hospitals and patients to actively develop and use the telemedicine, in order to avoid cross-infection caused by crowds in the hospital. Taking the digital health for example, patients with chronic diseases who need revisit regularly and have a stable condition did not need to go to the hospital during the epidemic, but they still could communicate with doctors "face-to-face", obtain the Rx, pay for the bill with the medical insurance and get the refilled drugs by delivery services. Similarly, the telemedicine has also worked in the treatment of the COVID-19 patients beyond geographic areas.

(14) How did China monitor the other provinces/districts that did not have cases of infection just for prevention and any early detection?

The province without cases strengthened "EARLY" strategies. It could monitor those arrival people at the entrance of airport, railway station, and high-speed exits.

(15) Is the Chinese academy pondering upon institutionalizing some crisis-measures into law to sustain the good practices post-COVID-19? Any proposals for the upcoming National People's Congress?

Yes. The academy is working on research, accumulating knowledge and summarizing good practices. I believe that many effective prevention and control measures and experience during the epidemic could be institutionalized, and could be incorporated into the law, regulations or policies. I think that there will be further discussion and deliberations in the coming National People's Congress in May.

(16) How easy is it to change the benefit package in systems with SHI or NHI at times of emergency? Or is that clause already built into the SHI Act

It was provisional arrangements in the outbreak by the National Healthcare Security Administration.

General questions to both:

Answers from Prof Soonman Kwon:

(1) What would the presenters would recommend to US policymakers as they consider reopening the sectors of the economy? What should be the key parameters?

- Seems too early to re-open. In Korea, we use indicators like number of new cases from domestic source, how % can we trace the path of infection, etc.

(2) What would be your suggestions to low-income countries those are trapped in nationwide lockdown to limit COVID-19 spread but not being able to roll out test to identify COVID-19 cases?

- Sorry, I do not have a good answer. I am not sure if a massive testing, as in Korea, is a cost-effective option for LICs.

(3) How were the additional financial resources for health (both treatment, building infrastructure, etc.) mobilized in short time in both S. Korea and China?

- As government successfully flatten the curve, we did not experience a big resource gap fortunately in Korea. In other words, NHI fund plus government budget support so far were able to meet the demand. When the economy is not good as expected, it will decrease the revenue (contribution) to NHI.

(4) Your views on herd immunity role to curtail spread of Covid-19?

- Herd immunity was a bit controversial at the very beginning in Korea. But we focused much more on testing, isolation and treatment because infection is so fast and mortality rate is high.

(5) How to provide immunization for infants or ANC to pregnant mothers (and other non-COVID-19 public health services) during the pandemic in both countries?

- There was no lockdown and health facilities are open in Korea. But people were reluctant to visit providers.

(6) How much of eternal donor support did China and Korea receive? And how quickly did those support arrive in the countries?

- I do not think Korea received external donation

(7) What are the lessons that the COVID-19 leaves for the strengthening of the health systems?

- I think early and rapid response is the key, which was the case in Korea. Then we can avoid (or mitigate) the crisis of health care system with the overflow of COVID patients.

(8) India is on the verge of opening up the long duration close down. Any specific suggestions for the government which is very critical at this point in time?

- Sorry I do not have a good answer. I am sure an incremental approach is better, i.e., opening public transportation first, followed by workplace, schools, etc

(9) How can we leverage digital solutions more in our response?

- Rapid testing, rapid reimbursement to providers, rapid tracing of contacts, etc in Korea

(10) How did S. Korea and China go about planning for exit strategy related to healthcare (how will you cover additional finances required on a sustained basis)? 3. What are some of the changes in healthcare that you think will sustain even after pandemic (in terms of health systems, health behaviors)?

- Government plans to ease the social/physical distancing soon. In Korea, we use indicators like number of new cases from domestic source, how % can we trace the path of infection, etc for the decision making of exit strategy.
- The main source of funding is NHI based on contribution in Korea. COVID-19 will restrain the NHI funding because it is likely to be difficult to raise contribution.
- Telemedicine was allowed for the first time during this health emergency in Korea

(11) Were additional incentive schemes implemented for health professionals?

- Yes additional pay for them in Korea

(12) Was there any plan to fund and maintain routine health care services despite the additional burden of OVID-19 on the human resources and existing health facilities to avoid collateral increase in morbidity and mortality?

- There was no lockdown and health facilities are open in Korea. But people were reluctant to visit providers. I think those patients will soon use health care. But the potential impact of COVID-19 on mortality/morbidity of other diseases is an important topic to monitor.

(13) How do you hope to vary or tweak the benefit package that earlier ruled out management of epidemics at a time like this pandemic?

- Benefit package of Korean NHI covers major components of infectious disease treatment. Benefit package were quickly expanded to include additional services and medicines related to COVID-19 in Korea

(14) In both countries, are there reflections to better/differently fund public health agencies as a reaction to COVID-19?

- Benefit package of Korean NHI covers major components of infectious disease treatment. Benefit package were quickly expanded to include additional services and medicines related to COVID-19 in Korea.
- Thanks to MERS experience, government increased funding to KCDC as the key agency, which contributed to a much better response to COVID-19 than MERS in Korea.

<u>Answers from Prof Yingyao Chen to general questions:</u>

(1) What would the presenters would recommend to US policymakers as they consider reopening the sectors of the economy? What should be the key parameters?

I would like to recommend to policymakers or the global health community: to evaluate the outbreak and its epidemic features in mortality, morbidity and its spread, to balance health and

economy and setting protecting lives as priority, and to prepare public health strategies to PREVENT the pandemic.

(2) How is heavy different from critical category in patient triage?

According to the classification criteria in the "COVID-19 Diagnosis and Treatment Program (Implementing the Seventh Edition)" issued by the National Health Commission, when the COVID-19 patients have any condition of these four situations: respiratory failure, needing mechanical ventilation, shock and needing ICU treatment because of combing other organ failure during treatment, they will be regarded as critical cases.

(3) What would be your suggestions to low-income countries those are trapped in nationwide lockdown to limit COVID-19 spread but not being able to roll out test to identify COVID-19 cases?

For people, keep social distancing, including taking masks, is very important.

For people with fever or other symptoms, go to health care facilities as soon as possible.

For health care facilities, to set up the fever clinic separately by careful triage to detect temperature and others.

For the government, subsidy to patients with symptoms to take tests.

Look for global health activities led by WHO or others.

(4) How were the additional financial resources for health (both treatment, building infrastructure, etc.) mobilized in short time in both S. Korea and China?

- After the outbreak, the Chinese central government quickly took action to coordinate medical resources across the country and supported Hubei Province for the treatment for COVID-19.
- The central government has sufficient power and capability to mobilize, integrate, and coordinate nationwide resources.
- China has established a healthcare system based on public hospitals. When the COVID-19 epidemic took place in China, it was reasonable and feasible to mobilize, integrate and centrally allocate high-quality medical resources across the country.
- The total scale of Chinese healthcare resources is relatively huge though Chinese per capita medical and health resources are small.
- Last but not least, the Chinese have a tradition and spirit of mutual assistance.

(5) Your views on herd immunity role to curtail spread of Covid-19?

Herd immunity happens when so many people in a community become immune to an infectious disease that it stops the disease from spreading. For COVID-19, because of its fatality rate and lack of vaccine, especially for old people, it's not reasonable and not ethical to use herd immunity to curtail spread of COVID-19.

(6) How to provide immunization for infants or ANC to pregnant mothers (and other non-COVID-19 public health services) during the pandemic in both countries?

I have answered similar question above. The immunization was keeping going but the procedures could be more complicated, checking at the entrance of the facility to triage “normal people/patient” or “high risk”.

(7) How much of eternal donor support did China and Korea receive? And how quickly did those support arrive in the countries?

China did get donor supports all over the world. Many thanks. I don’t know how much it would be. Those supports arrived at destinated terminals through the green channel.

(8) What are the lessons that the COVID-19 leaves for the strengthening of the health systems?

- To strengthen public health capacity, especially in the global and floating context, and developing new technologies for public health.
- To strengthen emergency medical treatment in hospitals.
- To improve awareness and knowledge of infectious diseases in public.

(9) India is on the verge of opening up the long duration close down. Any specific suggestions for the government which is very critical at this point in time?

I don’t have good understanding of India system, so I could not have specific suggestions. Maybe PREVENTION and PUBLIC HEALTH, especially for high-risk people.

(10) How can we leverage digital solutions more in our response?

In China, to fight coronavirus, we actively leveraged digital technologies such as artificial intelligence (AI), big data, cloud computing, blockchain, and 5G, which have effectively improved the efficiency of the country’s efforts in epidemic monitoring, virus tracking, prevention, control and treatment, and resource allocation.

(11) How did S. Korea and China go about planning for exit strategy related to healthcare (how will you cover additional finances required on a sustained basis)? 3. What are some of the changes in healthcare that you think will sustain even after pandemic (in terms of health systems, health behaviors)?

For the changes in healthcare, I think whether it is system building, human resource capacity building or capital investment, public health will receive more attention. People will pay more attention to the cultivation of healthy behavior, such as frequent hand washing, wearing masks, frequent ventilation, develop healthy eating habits, promote public chopsticks, and so on.

(12) Were additional incentive schemes implemented for health professionals?

Yes, in China, these additional incentive schemes vary among different regions. According to the contributions of front-line medical personnel, differentiated and multi-level incentive measures should be adopted, including both honorable incentive measures and material incentive measures.

(13) Was there any plan to fund and maintain routine health care services despite the additional burden of COVID-19 on the human resources and existing health facilities to avoid collateral increase in morbidity and mortality?

Yes, the National Health Commission issued a notice on further advancing the grading and restoration of normal medical services in March. Meanwhile, there were many efforts for routine health care services in different hospitals in China. Both the outpatient hall and the emergency department entrance were equipped with a temperature measurement device and a pre-examination triage office. Staff in protective suit took temperature measurements of each patient and family members who entered the hospital and guided them to the pre-examination triage table, guided patients with normal body temperature to the corresponding departments for treatment, and treated patients with abnormal body temperature or suspected epidemiological history, leading to the fever clinic.

(14) How do you hope to vary or tweak the benefit package that earlier ruled out management of epidemics at a time like this pandemic?

I think that we will have policies to support to cover the expenses due to any pandemic.

(15) In both countries, are there reflections to better/differently fund public health agencies as a reaction to COVID-19?

Yes, China CDC might get more funds to support its additional roles or functions to respond the infectious disease, similar at the local level.