



Life Sciences  
Innovation Forum

Webinar Series on Financing Immunization Programs:  
“Financing Life-Course Immunization for COVID-19 Response & Beyond”

7 May 2021

On 7 May, the APEC Life Sciences Innovation Forum (LSIF) hosted a webinar entitled [Financing Life-Course Immunization for COVID-19 Response & Beyond](#). It was the third in the series, [The Role of Vaccination in Maintaining Health and the Economy During Pandemics](#). This webinar brought together three expert presenters, along with moderator **Anupama Tantri of MSD**, to consider the challenges of vaccine financing and proactive funding solutions. Anupama Tantri’s opening statements highlighted the chronic underinvestment in immunization programs as governments around the world strive to roll-out COVID-19 vaccinations, noting that before the pandemic, only 11% of public spending in low- and middle-income economies was spent on health and prevention (and only 3% among OECD members). The following speakers addressed the need for increased spending and improved delivery of vaccines from a variety of angles – Dr. Chunhuei Chi explained the crucial nature of international collaborations to support mass immunization, Dr. Mursaleena Islam offered case studies of how data can translate into action to support delivery of vaccinations, and Dr. Ping-Ing Lee and offered solutions to the problem unfamiliarity with vaccine programs and the need to sensitize the public to the positive value of mass vaccination to society.

**Mobilizing Resources to Enable Urgent COVID-19 Mass Vaccination**

Dr. Chunhuei Chi described how mass vaccination requires adequate financing at each stage, from procurement, delivery, distribution, vaccination, and evaluation. Generally speaking, there are both domestic sources (e.g., MOH fiscal funds, extra-budgetary mechanisms, and trust funds and bonds) and external sources (e.g., COVAX, World Bank) of financing, but even when these sources are available mass volunteer participation may be essential, depending on the design and resources of immunization programs. In planning for the future of pandemics and mass vaccinations, therefore, it is crucial to recognize that “there is no one-size-fits-all”, and each economy has its unique situation and resource availability. Stakeholders must also recognize the essential role of international collaboration.

**Mobilizing Resources to Deliver COVID-19 Vaccinations and Beyond**

Through a series of case studies, Dr. Mursaleena Islam analyzed the cost of delivering routine immunization in the COVID-19 context, the cost of delivering COVID-19 vaccines, and the availability of financing for routine immunization. She began by presenting research from Thinkwell which assessed 8 economies and developed a model to project delivery costs across different implementation scenarios. The concluding projections indicated that the costs of delivering routine immunizations by outreach **could increase by 20-129%**. The second case study focused on determining the cost of delivering COVID-19 vaccines. To determine incremental delivery costs for vaccines for all 92 COVAX Advance Market Commitment (AMC) members, costs were modelled at the

**Key Vaccine Financing Risk Factors**

- The vast number of health interventions in competition with one another for funding
- Uncertainties among populations around safety and science behind vaccines and general immunization programs
- Lack of co-pay programs or individuals’ ability to afford vaccinations
- Donations from international organizations that primarily go to low-income economies (and therefore, middle-income economies often get overlooked)

**Key Practices to Combat Financing Shortcomings**

- Community education of available immunization programs prior to roll-out
- Utilizing social media and the news to share truthful, accurate scientific messages
- Communication of accurate science, safety, and risk-benefit considerations related to immunization.
- Mass volunteer participation in large-scale vaccination programs
- Consideration of individual economy shortcomings and needs to execute regular immunization programs (low-income needs vs. high-income economy needs)
- Collecting precise and updated data to ensure governments are adequately and accurately financing health systems



## Life Sciences Innovation Forum

global/regional levels as well as at the economy level. It was found that domestic-level delivery costs amounted to **US\$ 2.82 per fully vaccinated person**. The third case study analyzed the available financing for routine vaccination through analysis of pre- and post-pandemic budgets and cross-district financing adjustments for essential services in Indonesia. It was found that the economy's COVID-response reallocations resulted in a **decline** in the budget for routine immunization across all assessed districts.

Dr. Islam concluded from these case studies that the type of evidence needed for robust financing analysis varies from case to case, and as such case study context is crucial and dissemination of findings is key. By carefully looking at the health system and gathering useful, relevant, practical data, we can uncover how to fill the resource-needs of a health system.

### **Mobilizing Diverse & Sustainable Financing to Achieve Immunization Across the Life-Course**

Dr. Ping-Ing Lee discussed the government's important role in ensuring wide-spread immunization, along with ways that vaccine awareness can help solve financing challenges. Dr. Lee noted some of the key obstacles to the financing and delivery of vaccines, including:

- The fact that cost cost-effectiveness analyses do not account for impacts other than finance (e.g. psychological);
- The need for maintaining independent budgets for immunization to ensure sustainable financing (in the case of Taipei, for example, only about half of vaccine funding comes from the government, with the rest supported by tobacco taxes which are not likely to increase in the future);
- The vast number of health interventions in competition with one another for funding, among which immunization does not usually draw much attention from the government;
- The fact that donations from international organizations like GAVI and UNICEF primarily go to low-income economies, often causing middle-income economies to be overlooked; while individual donations more often go to elderly-care facilities, or religious facilities.

In providing solutions for funding vaccination programs, Dr. Lee concluded that increased awareness of the importance of vaccines and vaccine-preventable diseases is needed. Benefits will include reduced vaccine hesitancy, increased vaccine acceptance, and increased motivation of stakeholders to support vaccination programs. Strategies may include schooling and education through the media.

All three experts addressed the problem of vaccine cost as well as the motivation for immunization program funding. Financing barriers arise in the form of general hesitancy due to lack of education, inability for individuals to afford routine vaccinations, and government underfunding as a result of competing priorities. The pandemic highlights a unique question: How can we encourage policy makers to invest in and encourage routine vaccination not only in the short term – but in the long term through sustained investment? Good practices in this regard, highlighted in the discussion, include examining the unique situation of individual economies, identifying where investments will meet the most positive responses; identifying the resource needs of a health system through collection of relevant and practical data; and educating to ensure awareness of the importance of vaccines, for the public and for key stakeholders.

*To view a recording of the webinar and associated presentation slides, [please visit the event page](#).  
To participate in future webinars, [please register online](#) and you will be notified of future sessions.*



**Life Sciences  
Innovation Forum**

**Further Reading**

ThinkWell

- Flavia Moi, Christina Banks, & Laura Boonstoppel (2020). 2020. Report: [The cost of routine immunization outreach in the context of COVID-19; estimates from Tanzania and Indonesia](#). ThinkWell.
- Christina Banks & Laura Boonstoppel (2020). Report: [Immunization campaigns during the COVID-19 pandemic. A rapid analysis of the additional operational cost](#). Thinkwell.
- (2021). Technical Brief: *Maintaining Essential Services during the COVID pandemic in Indonesia [Forthcoming]*

World Health Organization

- (2021). [Costs of delivering COVID-19 vaccine in 92 AMC countries – Updated estimates from COVAX Working Group on delivery costs](#). Covax Working Group on Delivery Costs (WHO, GAVI, & UNICEF).

Kung-Liahng Wang, Cherng-Jye Jeng, Yuh-Cheng Yang, Chi-An Chen, Wen-Fang Cheng, Tze-Chien Chen, T. Chrisopher Mast, Ya-Chuan Wang, & Chang-Yao Hsieh (2010). [“The psychological impact of illness among women experiencing human papillomavirus-related illness or screening interventions”](#). *Journal of Psychosomatic Obstetrics & Gynecology*, 31.



**Life Sciences  
Innovation Forum**

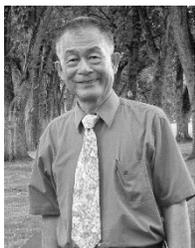
<b>Meeting Agenda</b>	
<b>Opening remarks and welcome</b>	
<b>Presentations</b>	<b><u>Financing Life-Course Immunization for COVID-19 Response &amp; Beyond</u></b>
	<b>Chunhuei Chi</b> , Professor, Oregon State University
	<b>Mursaleena Islam</b> , Program Director, Thinkwell
	<b>Ping-Ing Lee</b> , Professor, National Taiwan University
<b>Moderated Discussion</b>	
<b>Audience Question and Answer Session</b>	
<b>Closing Remarks</b>	

**Speaker Biographies**



**Anupama Tantri**

Anupama Tantri leads the Global Vaccines Public Policy Development team at Merck which oversees the research and development of global policy strategies to advance access to vaccines, sustainability of immunization efforts, and healthy vaccine markets. Prior to joining Merck, Anupama worked with the Sabin Vaccine Institute, leading advocacy efforts to increase prioritization of and funding for neglected tropical disease elimination and control programs across the Asia Pacific region. Anupama also spent over 5 years at the U.S. Centers for Disease Control and Prevention (CDC) where she worked on several global and domestic areas, including environmental health, polio eradication, and H1N1 influenza response. She is a graduate of Oberlin College and the Johns Hopkins School of Public Health.



**Chunhuei Chi**

Chunhuei Chi is the director of the Center for Global Health at Oregon State University, and a professor of global health program and health management and policy program within the College of Public Health and Human Sciences. He is also a visiting professor at Taipei Medical University and National Chengchi University in Chinese Taipei. He studies comparative health systems and universal health care around the world, governance of national health systems, global health development and policy, and health system finance and assessment. His areas of expertise include global health governance, health systems finance and strengthening, and the history of how COVID-19 emerged, different national responses to this pandemic, especially that of Chinese Taipei, Japan, Singapore, South Korea, U.S. and Chile; national and state strategies/policies addressing this pandemic; and international collaboration in pandemic control.



**Life Sciences  
Innovation Forum**



**Mursaleena Islam**

Mursaleena Islam is a program director and senior economist with over 20 years of experience in the US, Asia, and Africa, including Bangladesh, India, Indonesia, Liberia, Myanmar, Nepal, Nigeria, Pakistan, Philippines, Tanzania, and Vietnam. Dr. Islam specializes in health financing (including immunization financing), strategic partnerships, policy analysis, and program design. Dr. Islam works closely with governments and private sector clients on financial sustainability, health sector policy, insurance, innovative health financing, and strategic planning. Dr. Islam was the technical lead for health systems at the Gavi Secretariat in Geneva, where she led the redesign of Gavi's immunization financing approach with a systems strengthening focus and with performance-based financing.



**Ping-Ing Lee**

Dr. Ping-Ing Lee is associate professor of the Department of Pediatrics at the College of Medicine, National Taiwan University, and is attending physician at the Department of Pediatrics, National Taiwan University Children's Hospital. Dr. Lee serves as the chair of the Advisory Committee on Immunization Practices at the Center for Disease Control within the Department of Health of Chinese Taipei, and is engaged in pediatrics, infectious diseases, vaccination, pneumonia, hepatitis and gastroenteritis. He has published more than one hundred peer-reviewed academic papers in English, and more than two hundred health-related articles for the public in Chinese.