



**PMAC** | PRINCE MAHIDOL  
AWARD CONFERENCE **2018**



## **PARALLEL SESSION 4.5**

**BRINGING SOLUTIONS INTO FOCUS: HARNESSING THE POWER OF AN  
ECONOMIC LENS**



## | BACKGROUND

Beyond the tragic loss of human life, the economic impact attributable to epidemics and pandemics can be catastrophic. SARS, \$30 billion; Pandemic H1N1: \$40 billion; Ebola: \$2.8 billion in the three West African economies alone. Recent estimates place the inclusive costs from a moderately severe influenza pandemic at \$570 billion annually, within the range projected for the annual cost associated with global climate change. And, without intervention, the cumulative economic impact from anti-microbial resistance (AMR) through 2050 is projected to exceed \$100 trillion (two-thirds of which is in low- and middle-income countries), substantially more than current annual global economic output.

Despite a repeated pattern of costly response, the economic case for investing in proactive, preventive measures targeting a reduction in the pressures that facilitate disease emergence has not been widely adopted. A yearly investment of \$1.9-3.4 billion to strengthen animal and human public health systems would yield a global public benefit estimated at over \$30 billion annually through avoided economic damages associated with pandemics. High return on investment is expected even if only a portion of pandemics are prevented, and strengthened One Health capacity in countries may confer additional benefits via improved prevention and control of endemic disease and AMR. However, challenges in mobilizing capital; an anemic evidence base and difficulty in translating evidence into policy advocacy with budget decision-makers; competing priorities for scarce health systems funding; and inequitable distribution of costs and benefits across sectors and stakeholders are all amongst the impediments to adopting the economic case for investing in preventive approaches.

Recent efforts designed to address these challenges have employed a range of approaches. Structures prioritizing risk avoidance and transference are being developed (e.g. multi-sectoral health security planning and capacity investments; epidemic/pandemic insurance structures). Also underway are new models capturing the economic impact of disease emergence as a function of land use, which will enable the disease regulatory role of ecosystems to be fairly valued and incorporated into payment for environmental services frameworks. And global financing structures promoting targeted, multi-sectoral systems strengthening and incentivizing investments in preparedness are being established.

## | OBJECTIVES

- Highlight successful practices and approaches that have demonstrated promise in fostering decision making informed by economic analyses;
- Profile structures with proven utility in transcending the identified challenges, including resource prioritization and inequitable sectoral cost and benefit distribution;
- Discuss approaches that strengthen the economic evidence base for investments in proactive, preventive disease mitigation approaches; and
- Review policy and regulatory options, such as tax and incentive structures, that can contribute to a favorable investment environment for more wide scale adoption of risk mitigation approaches



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Panelist

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Laxminarayan is director and senior fellow at the Center for Disease Dynamics, Economics & Policy (CDDEP) in Washington, D.C., and a senior research scholar and lecturer at the Princeton Environmental Institute at Princeton University. He is an affiliate professor at the University of Washington and a visiting professor at the University of Kwazulu Natal and the University of Strathclyde. Laxminarayan is founder of HealthCube, which works to improve access to healthcare and diagnostics. Since 1995, Laxminarayan has worked to improve the understanding of antibiotic resistance as a problem of managing a shared global resource. His work encompasses extensive peer-reviewed research, public outreach, and direct engagement in eleven countries in Asia and Africa through the Global Antibiotic Resistance Partnership. Through his prolific research, active public outreach (including a TED talk that has been widely viewed) and sustained policy engagement, he has played a central role in bringing the issue of drug resistance to the attention of leaders and policymakers worldwide and to the United Nations General Assembly in September 2016. Laxminarayan has served on the U.S. President's Council of Advisors on Science and Technology's antimicrobial resistance working group and is currently a voting member of the U.S. Presidential Advisory Council on Combating Antimicrobial Resistance. He is a series editor of the Disease Control Priorities for Developing Countries, 3rd edition. In 2012, Laxminarayan created the Immunization Technical Support Unit that supports the immunization program of the Ministry of Health and Family Welfare of the Government of India and which is credited with helping rapidly improve vaccination coverage and introduction of four new vaccines. As Vice President, Research and Policy at the Public Health Foundation of India between 2011 and 2015, he led the growth of a research division to over 700 technical and research staff. Laxminarayan's work has been covered in major media outlets including Associated Press, BBC, CNN, the Economist, LA Times, NBC, NPR, Reuters, Science, Wall Street Journal, and National Journal.