

Strategies to support the COVID-19 response in LMICs

A virtual seminar series

Resource Page

COVID-19 Economics

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Economics: The study of choices under uncertainty

Health Economics: The study of health choices under uncertainty

Public Health Economics: The study of public choices that determine the health of places

Section 1: Public Health Economics of COVID-19

- Spending: US “officially” spends \$90 billion on public health (\$10 billion by CDC; \$80 billion by states and counties)
 - Pre-Covid-19: health departments were starved and distracted by block grants
- Effects of county public health (PH) spending on COVID-19 apex:
 - Being in top quartile of PH spending hastens time to apex by 7%
 - Poorest quartile of counties had peak COVID-19 prevalence 32% higher than the richest quartile
- Spending choices of public health departments
 - Grants drive spending
 - Only 39% of budget (in Baltimore City) is devoted to public health spending: not able to address the public health problems that could be addressed
- US approach to public health: public health claims only 3% of US health spending
 - Healthcare spending grew 52% in the past decade
 - Local health department budgets shrank by up to 24%
 - CDC budget has remained flat
 - There is still evidence that public health departments save lives

Section 2: Economics of a COVID-19 Vaccine

- Phases of vaccine discovery: process costs approximately \$1 billion
 - Phase 1: Screen thousands of molecules for biological activity (in vitro & animals)
 - Phase 2: Conduct human trials for safety, dosing, and efficacy
 - Phase 3: Get FDA approval
- COVID-19 vaccine value is based on things we do not know
- New paradigm characterized by massive public investments in production capabilities
- Shortages still likely
- Pharmaceutical companies face challenging decisions at every timepoint of production

Section 3: Economic Vulnerability

- Social lockdown policy costs and benefits:
 - Benefits = lives saved (but only a specific subset of lives are saved by lockdowns)
 - Costs = lost economic output
- There are many countries where the costs of lockdown outweigh the benefits
 - More people are expected to die from lost livelihoods and poverty than would be saved from COVID-19 control
 - Niger, Namibia, Senegal, Republic of Congo, Kenya, Tanzania, Cape Verde, Rwanda
- Public health advice must be tailored to the local context