

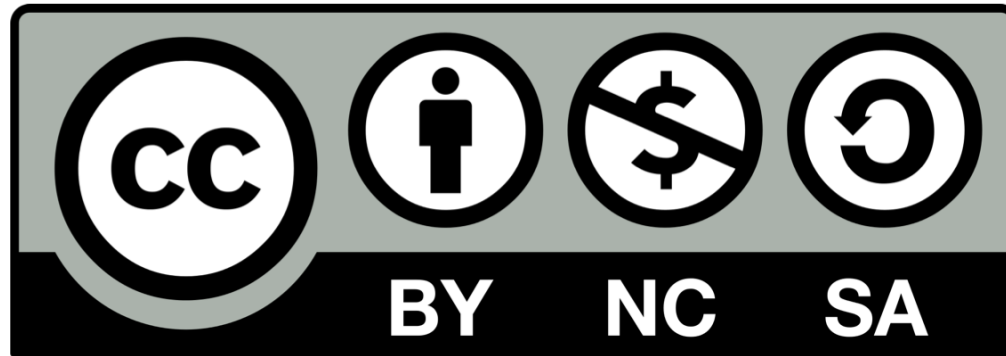
Introduction to Health Economics

Economics of Vaccine Delivery



TVEE
TEACHING VACCINE
ECONOMICS EVERYWHERE

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Outline

- Understanding how vaccine campaigns affect demand
- Expanding vaccine coverage (routine vs outreach)
- Financing vaccine delivery system
- Insurance and application in vaccines

Why do we demand things?

- Demand is the willingness to incur costs to achieve a goal
 - Costs are both time and money
 - The gain from achieving the goal has to be bigger than the cost
- How do we know that goals are worth it?
- Utility is a word for how satisfied we become when we reach our goals

A Utility Function

Things

- Food
- Music
- Shelter
- Social status
- A sense of belonging
- A sense of mattering to others
- Health

Utility

- A numerical representation of how happy we are because of the things and experiences we have

Vaccines and Utility

Narrow View Utility from Health

- Vaccines help you avoid the virus you are being vaccinated against
- Life has less chance of sickness and death

Broad View Utility from Identity and Social relations

- Getting vaccinated makes you attractive to others
 - Utility from being approved of
- Getting vaccinated means you are a responsible person
- Getting vaccinated means you will worry less
- People notice when you don't get vaccinated

Demand-side Issues That Affect Immunization

- Cultural beliefs/ religious beliefs
- Side effects of vaccines
- Long distances to static clinic or immunization site
- Ignorance about return dates, importance of vaccination + home deliveries

Vaccine Delivery Systems

- There are different types of vaccine delivery models
 - Routine
 - Outreach
 - Mass immunization days
- A combination of delivery models is required
- Choose a combination that maximizes efficiency but tries to minimize wastage and promotes equitable access (reduces barriers), promotes access to the target group

Vaccine Delivery Systems

Demand for vaccines varies across the population and so different strategies help:

- Routine vaccination for children, mothers, teenagers should be delivered regularly, low cost method, efficiently
- Outreach to increase access in hard to reach places
- Special campaigns (mass immunization days, house to house) to increase attention, to eradicate particular illnesses

Routine vaccination

Routine vaccination provided through several systems pros and cons

- Publicly funded system with public provision
- Mixed public funding with mixed public and private service provision e.g. Vietnam
- Public health insurance and mixed public private provision e.g. Thailand

Outreach

- Everyone in community gets vaccinated in the same day or week
- Broad affirmation that everyone should do this
- Promotes a sense of solidarity

What do these pictures mean for demand?



Supply-side Issues That Affect Immunization

- Power outages – efficacy of vaccines
- Cost /charges by private facilities
- Informal fees and fees eg for syringes
- Long waiting time because of health worker shortages
- Vaccine shortages
- Facilitation for outreaches
- Awareness , operational costs & organization for campaigns

Which is better for maintaining demand?

- Routine vaccination
 - Pros
 - Cons
- Campaigns
 - Pros
 - Cons

Part 2: Financing and Insurance

Financing Vaccine Delivery System

- Countries need stable sustainable financing for vaccines
- Funding for vaccines must be balanced against other health systems needs
- General tax funding still the most sustainable form of funding augmented by donor funding

Special Financing for Vaccines

- Having a devoted workforce to work on vaccines and have resources to move them out to patients
- Historical origins because of the externalities of vaccines
 - Donors have a special interest and they want their money to only go for vaccination
 - Donor demand tied to the warm glow they get from vaccine coverage
- It's practical to maintain careers and expertise in the specialized knowledge required in immunization programs

Financing vaccine delivery system

Some countries are graduating from funding from Gavi
what will this mean in the face of

- Low domestic financing for vaccines
- Very expensive new vaccines
- New methods of financing – trust funds, lotteries

Financing Vaccine Delivery System

Criteria for assessing financing for vaccines

- Additional resources raised
- Cost
- Predictability
- Sustainability
- Flexibility
- Equity

Performance of a financing mechanism depends on local context

Financing Vaccine Delivery System

- How to make the most out of the available funding
- Increase efficiency with which vaccines are procured
 - Central procurement
 - Negotiate for best prices
 - Provide appropriate incentives for delivery of vaccines
 - Functional Public financial management systems to reduce wastage/corruption

Fungibility

- Fungibility refers to a government being able to transfer money raised for one purpose to another purpose
 - Get donations for vaccines so there is more money for tertiary care.

Fungibility and Fiscal Space

- Fiscal space refers to a governments total amount of net revenue from taxes, tariffs, borrowing, and aid net of its obligations
 - Fungible transfers from foreign donors add to fiscal space
 - Additional taxes or user fees add to fiscal space
 - Lower rates of vaccine preventable disease add to fiscal space

Insurance and Application in Vaccines

- Insurance funds provide an opportunity for additional financing for vaccines as well
- Vaccines diff to sell as part of package since benefits less tangible
- Some insurance programs don't include vaccines , when vaccines part of insurance package then provision is assured
- Multiple insurance schemes may
 - Confuse delivery system for vaccines
 - Make it difficult for clients to know where services are to be provided

Simulation Exercise

- Effect of different vaccine delivery systems on demand and supply of vaccines
- Demand increases when client costs are low and services more accessible but this may raise provider costs of production