

Technological innovation and healthcare costs

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Background

- The economic liberalization process started in 1990s created a vast range opportunities in the health care market.
 - Rapid proliferation of health technologies across different levels of care
 - Breaking choice and efficiency constraints and expanding marketplace
 - Pushing up costs, especially in medical care

Modern technology and health care costs

- Average hospitalization cost in private hospitals increased from Rs. 11500 in 2004 to 25850 in 2014 (NSSO) – an increase of 125%.
- Economists agree that continued development and diffusion of modern med technology is one of the dominant contributors to spiraling healthcare costs.
- Paradoxically, this is the only industry where technology increases costs even after scaling it up.

Why this paradox?

- Different types, and increasing use of relatively higher-cost, lower value technology (Type 3 technology).
- High prevalence of supplier-induced demand for this type.
- Generous insurance system which pays for a treatment regardless of its effectiveness

Policy response

1. Price intervention: Administered prices for services set by the government
2. State-sponsored medical insurance: Financial protection for universal coverage
3. Using public funds for public health intervention based on modern technology

Price intervention by government

- Seems to be the new rule of the game – through strategic purchasing
- Usually a political decision – may produce unintended results

State sponsored insurance

- Good intention – to protect the people from financial disaster
- May accelerate the spiraling cost if it follows the traditional model of reimbursement

State sponsored technology

- Primarily adopted through new programmes, especially after NRHM launched
- Several low-cost, high value interventions led to rapid improvement in health outcomes
- However, there are recent trends in adopting high-cost interventions (e.g., in immunization)

Example: Indian immunization programme

- Widening the UIP by introducing new vaccines, such as PCV and HPV - expensive and produced by MNCs
- Government budget on immunization needs to be increased by 300% to accommodate these vaccines in UIP.
- The question is: is it really worth investing that much?

Shift to evidence-based prioritization in health technology

- Growing recognition of economic evidences to determine the priorities in selection of health technologies
- The basic principle is: assess the economic value before you spend on new technology
- Key questions that can be addressed through these evidences:
 - Will it generate substantial benefit compared to its cost?
 - Could more benefits be generated by spending on alternative technology?
 - What should be the threshold of investment on new technology?

How to control costs?

- Focus more on innovations in organization and delivery of services (rather than equipment, drugs, and diagnostics) – for example, information technology
- Encourage generation of economic evidences to assess value for money before adopting a new technology
- An aggressive policy to encourage innovators of low-cost, high-value technology

Thank you !