

Essential medicines supply chains and inequality



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Supply chain innovation in essential medicines for low income Africa

1. A contested field of recent innovation in pharmaceuticals, and
2. A contested metaphor for what is needed in health systems innovation.

This talk briefly discusses:

- Context
- Competing/interacting supply chain innovations
- Indicators required and policy issues

A contested field of recent innovation in pharmaceuticals: a Tanzanian case study

Three supply chain innovations:

- Increased local production of essential medicines, including first line ARVs
- Large scale aid-funded external supply of ARVs and TB drugs
- Subsidy for prices of combination malaria medicines (AMFm).

A contested field of recent innovation (2)

Two key contextual features:

- Dominant commercialisation of essential medicines access: fee-for-service and out-of-pocket payment; widespread exclusion for inability to pay.
- Retreat of first tier Indian exporters from the low price African generics markets in favour of higher margin exports.

Payment at time of need is a source of exclusion

- Except in a few rural public dispensaries, medicines are largely purchased for cash.
- Payment a major source of exclusion and impoverishment
- 2000/1 : 33% of those ill sought no care
 - Of whom 58% saw a need to seek care
 - Of whom 56% found care seeking too expensive
- 2006 : 95% of those interviewed while seeking care had paid for own medicines;
 - 8% on exit had not been able to afford medicines sought and available; 15% had bought part-dose

A contested field of recent innovation (3)

Competing/interacting innovations:

- Local production: providing a high proportion of local private market and local public wholesale basic medicines;
- Externally funded and purchased ARV/TB medicines, mainly Indian, no Tanzanian qualified suppliers; free at point of use.
- Subsidised ACTs for malaria to reduce private market and public sector prices.

Supplies from Tanzanian manufacturers important to access

- 3 dominant suppliers: Tanzania, India, Kenya;
- 46% of tracer medicines observed in rural areas were of Tanzanian manufacture
- Of permitted medicines in drug shops, 66% on average from Tanzania (18% Kenya 11% India)
- Tanzanian supply dominant for many basic medicines; only injectables, some chronic illness medicines only available as imports
- Tanzanian medicines cheaper but not significantly: price competitive with imports
- Reliable Indian manufacturers losing interest in African markets

A contested underlying metaphor (1)

‘Supply chain’ originates in industrial contracting: implies management of process of supply to manufacturing.

The metaphor has ‘got out’ into wider discussion of supply of medicines to individual consumers/ users/ patients.

Associated with a related metaphor – ‘delivery’ – invoking top-down control.

Sits oddly in a context where most people struggle to buy medicines and most private sector sales off-prescription.

A contested underlying metaphor (2)

‘Supply chains’ to local market :

- ~50% public wholesaling: *managed* chain: quality control of procured medicines, around 30% from local production, rest mainly Indian imports
- ~50% competitive private wholesaling into private market, little quality control at wholesale level, also around 30% local production

National regulatory body accredits Indian and Tanzanian suppliers.

A contested underlying metaphor (3)

‘Supply chains’ of ARVs and TB drugs:

- Managed chains from accredited international – mainly Indian – exporters;
- Almost entirely on-prescription – through facilities – and free at point of use
- Local producers excluded: have yet to reach WHO pre-qualification standard
- Contested wholesale stage: new actors vs. public wholesaler
- Emphasis on delivery : counting heads.

A contested underlying metaphor (4)

'Supply chain' for new malaria drugs different:

- Aim to reduce market prices : subsidy to suppliers of combination therapies
- No shift to free at point of use, or prescription-only :pushing new drugs into private market
- Widespread under-dosing and over-use (for other fevers) implicitly accepted

Innovations and inequality (1)

Contested and competing 'supply chains':

1. A 'delivery chain' from (only) international firms to facilities treating free at point of use
2. A supply chain from local firms and imports to public/NGO facilities for treating for payment
3. A private market without a controlled chain, selling both subsidised imports and local and imported commercial supplies.

Implications for inequality?

Innovations and inequality (2)

Implications for inequality:

1. The least inegalitarian and most treatment-based; high international subsidy.
2. Middle range inegalitarian: treatment based, subsidised prices, quality control, exclusionary (stockouts and prices)
3. Highly inegalitarian: payment based, not treatment-based, market subsidy reduces exclusion somewhat.

All three together is a mess?

Innovations and inequality (3)

Links to industrial pharma innovation?

- 1 (HIV/TB) and 3 (malaria) exclude local suppliers : subsidy and market exclusivity for international suppliers; negotiated internationally in public-private deals
- 2 encourages local suppliers, links to upgrading of local industrial capabilities and employment in basic medicine including ARVs.

Innovations and inequality : propositions on indicators

1. The further the 'supply chain' for essential medicines moves towards a market exchange relationship between producers and consumers, the further it moves from an ideal of egalitarian and appropriate treatment for illness.

Therefore health system innovations should be judged on the proportion of paid-at-point-of-purchase medicines : the smaller, the better.

Innovations and inequality : propositions on indicators

2. The more innovative supply chain technology relies on external expertise and funding, the less the innovation is sustainable as part of the local health system.

Therefore managed supply chain innovations should be judged on cost per patient, and the capability for sustainable scaling up from individual health interventions to population health needs.

Innovations and inequality : propositions on indicators

3. The health system effects of subsidy depend on the recipient of the subsidy and the efficient use of subsidy. The malaria medicines subsidy is hugely expanding the market for large firms with patent-based monopolies. How do we know this was the minimum subsidy required?

Health system innovations should be assessed on the progressive use of subsidy: is it sustaining monopoly pricing at producer level?

Innovations and inequality : propositions on indicators

4. The WHO prequalification system's 'gatekeeper' role targets market access on large firms winning very large tenders. The initial effect in driving down HIV medicines prices relied on Indian generic competitors. The system places a very high hurdle for local firms.

Health system effects of medicines supply chain innovations should be judged on the medium term impact on monopoly power in the supply chain.