

Challenge 3: Ineffective Supply Chains

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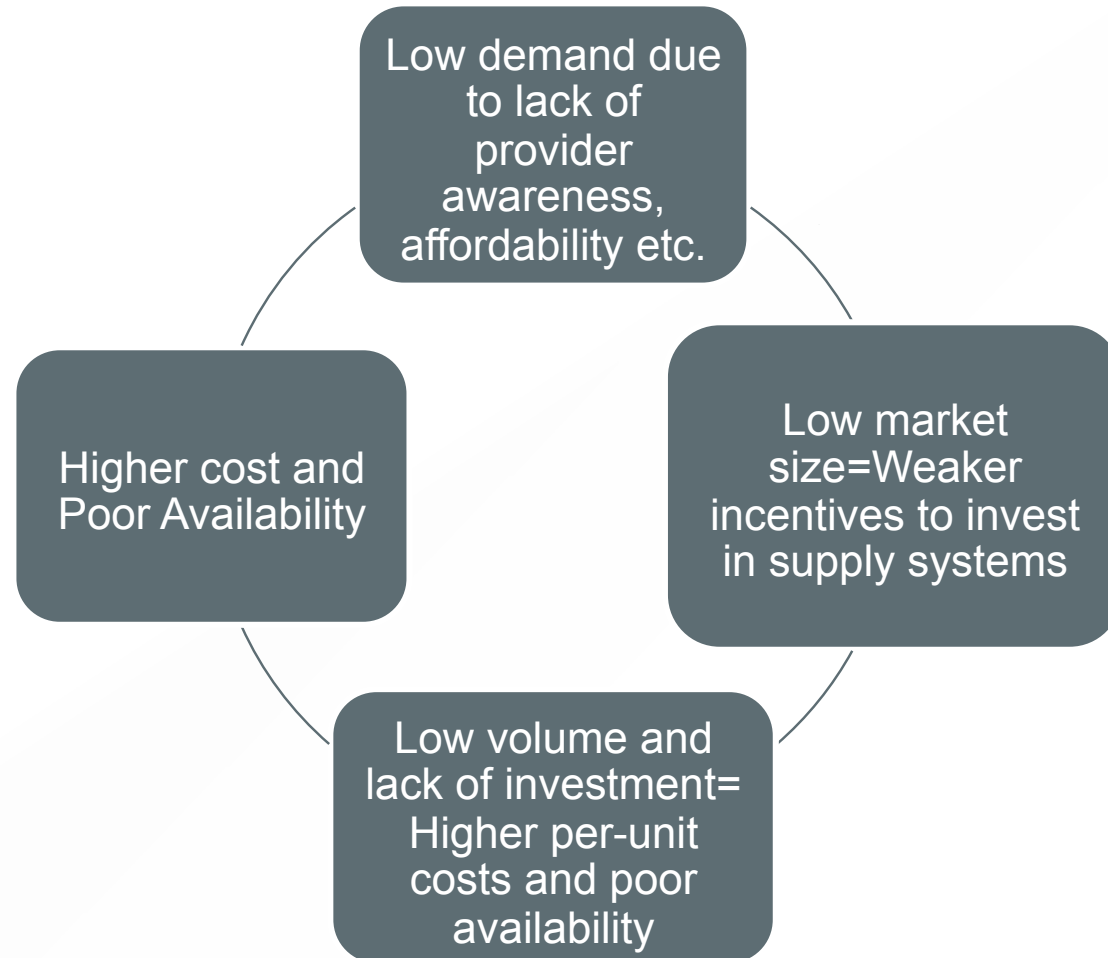


William Davidson Institute
AT THE UNIVERSITY OF MICHIGAN

IOM Workshop on Improving Access to Essential Medicines for MNS
Disorders in Sub-Saharan Africa
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Why worry about supply chains for MNS products? 2

The low demand–low supply trap



The problem of Market Information Asymmetry

- *Low market size* and *high cost-to-serve* make some markets less attractive for MNS manufacturers
- This leads to products not being registered in the country or fewer products for each condition
- Is the market size small and cost to serve genuinely high? Or is it information asymmetry /information opacity?
- The time (and corresponding cost) it takes for essential medicines to be registered in-country is quite high
- This leaves few or no supply sources to purchase from, which in turn leads to high prices or lack of availability
- AMRH and other regulatory harmonization initiatives are addressing this through harmonization i.e. reducing the cost of registration
- What more can be done? Can there be other time limited interventions with “hysteresis” effect

Other challenges in serving markets in sub-Saharan Africa

High costs to serve relative to market potential

Non-availability of GDP compliant distributors

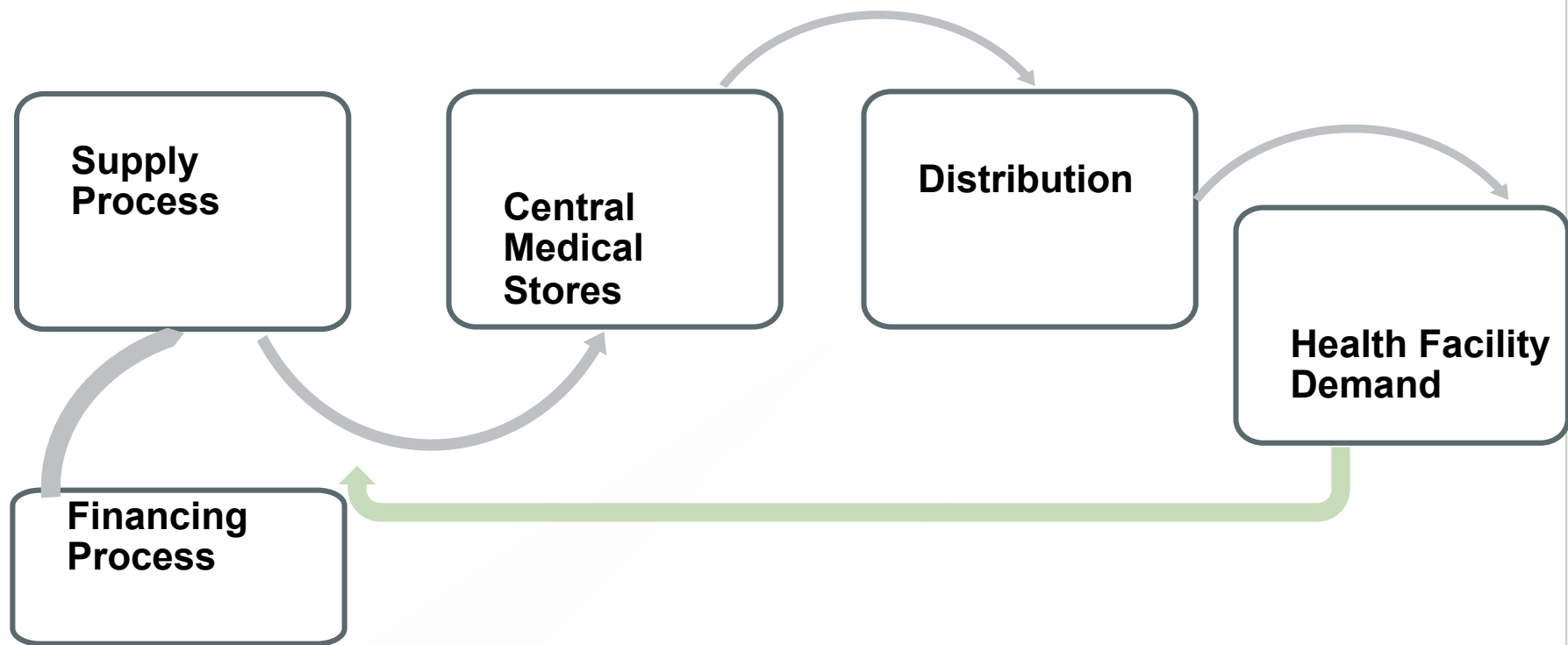
Extremely fragmented pharma wholesaling market

Fragmented and poorly developed pharma retail sector

Too many intermediaries and high distribution /channel markups

Lack of data about the supply chain structure or flows

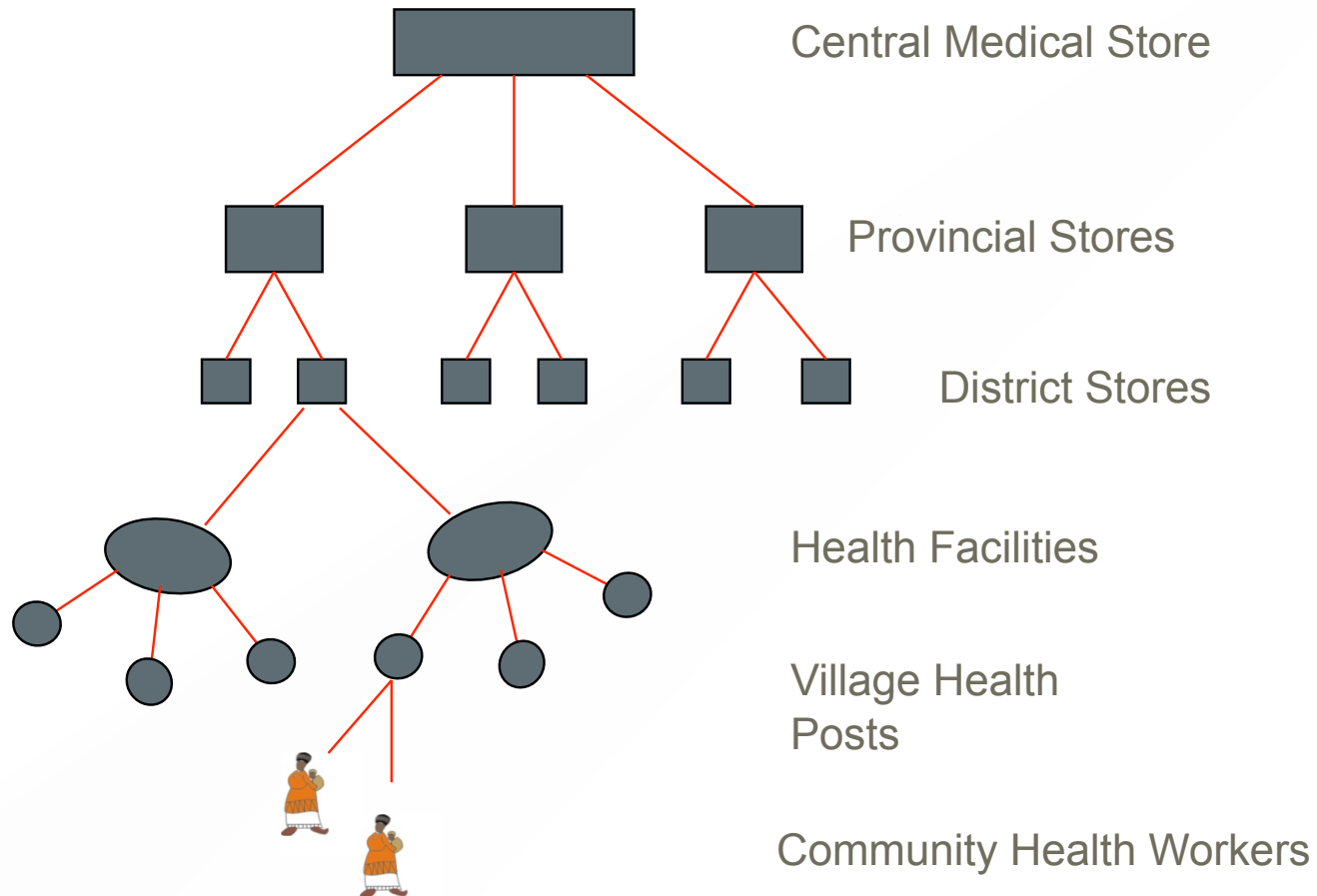
Vicious cycle of uncertainties faced in the Medicine Supply System



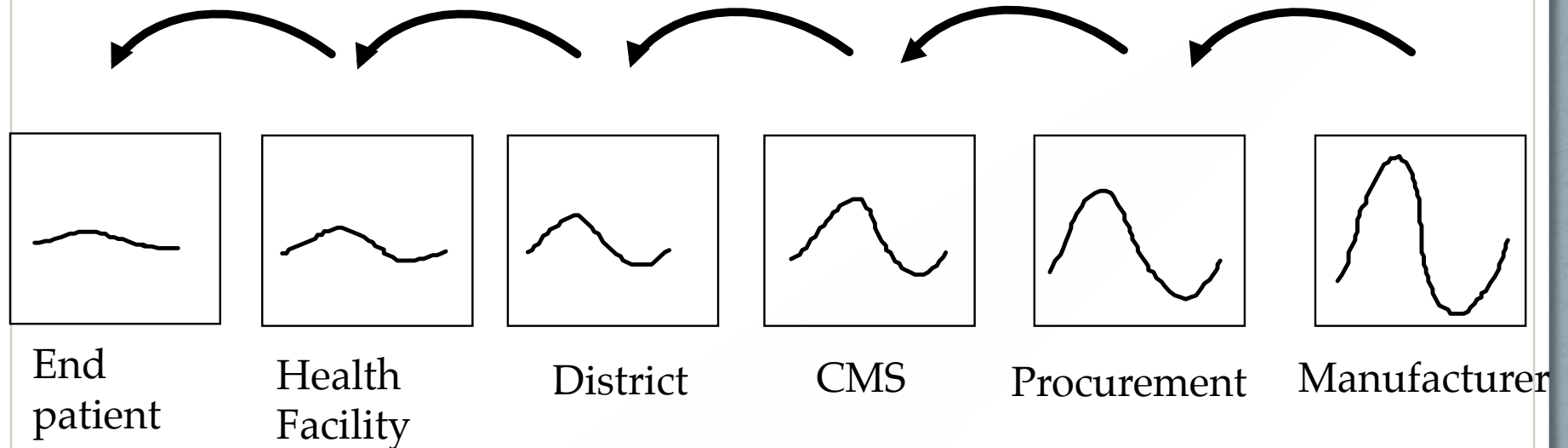
Scale up requires concerted effort to get out of this vicious cycle

- 1. Understanding health facility demand**
- 2. Well managed financial and procurement process**

Do we need these many layers and this much complexity?



The corrupting influence of distribution structure complexity



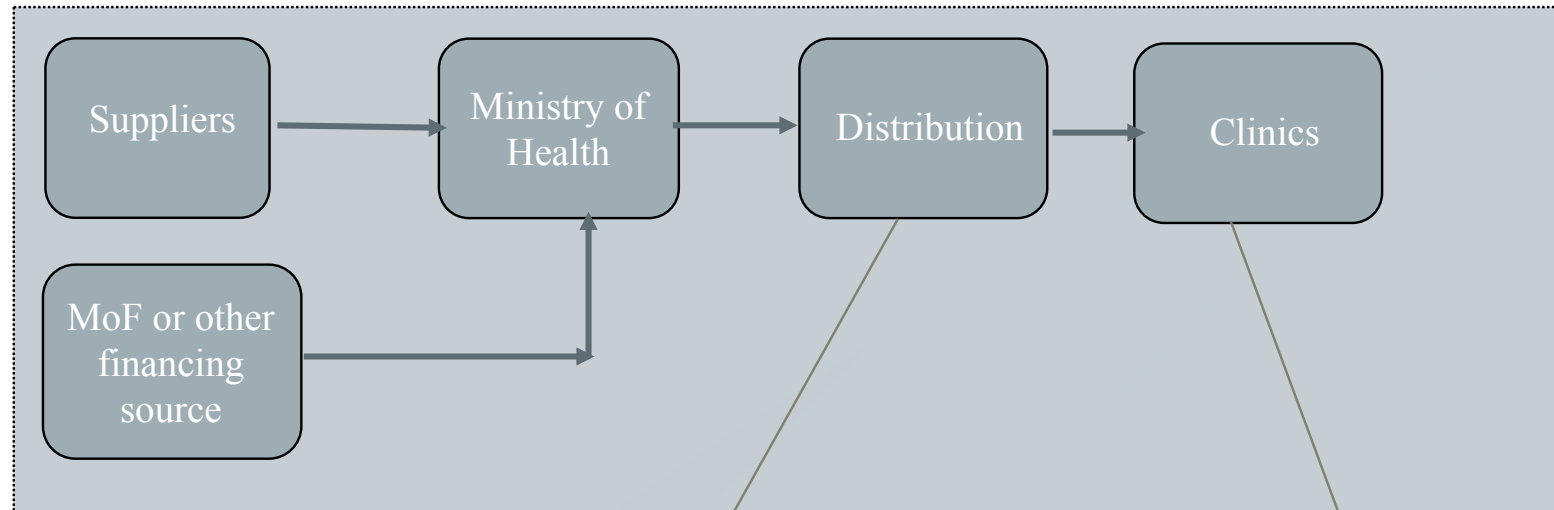
Bull-whip effect: Amplification in demand variability as it goes upstream in a multi tiered distribution system

Fewer layers in the distribution system help remain in sync with actual demand

How can we change from “business as usual”

- ***Create agile procurement structures***
- ***Redesign distribution network***
 - Fewer tiers (level of stock holding) in the system
 - Higher frequency of shipments between each stage in the system
 - Private third party transport
- ***Align incentives for higher performance***
 - Change incentives of all supply chain staff
- ***Transform information collection***

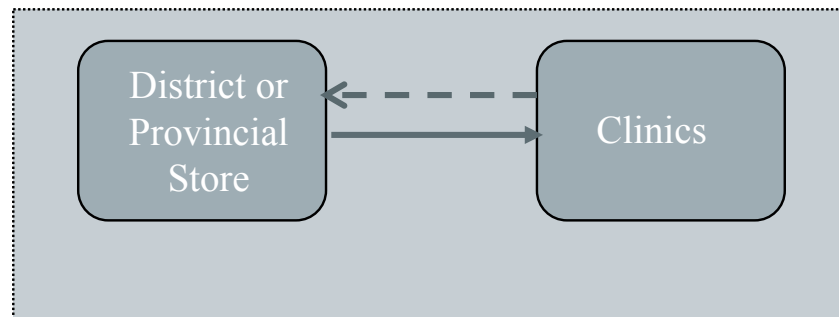
Factors that led to poor availability



- State monopoly on distribution
- Weak incentives for performance improvement
- **Last mile transport challenges**
- Poor information flows

- **Weak staff capacity to manage inventory**
- **Poor or no consumption tracking**

Coupling last mile delivery with information flow and requisitioning



1. Zimbabwe- DTTU- USAID/Deliver
2. Village Reach- DLS in Mozambique
3. Senegal- moving warehouse-
4. Nigeria- pilot project
5. Others

- In systems with weak clinic level capacity for ordering/ requisitioning, it may be best to shift the loci of that decision making
- In systems with challenging last mile delivery it is effective and efficient to combine information collection and physical distribution
- What prevents us from scaling up such models?