'Workforce excellence is essential for sustainable health supply chains'



Other duties as required: efficient use of human resources in Mozambique

Wendy Prosser VillageReach

Financial sponsors:







Things We All Know....



The crisis in human resources for health is exacerbated at the last mile of supply chain management:

- Inadequate number of health workers and supply chain specialists.
- Tasked with many responsibilities, supply chain management becomes incidental or passed to untrained staff.
- Inadequate training in logistics and supply chain management.
- Health workers unable to dedicate time to core responsibility of providing primary care due to "other duties as required".

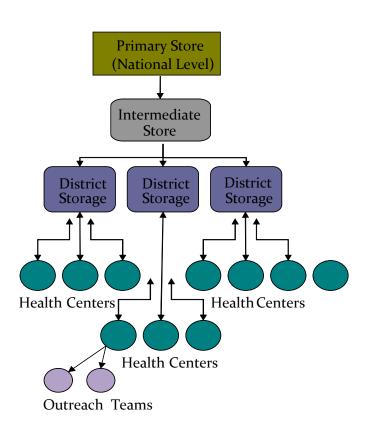


A fundamental issue is the system in which the health worker is working.



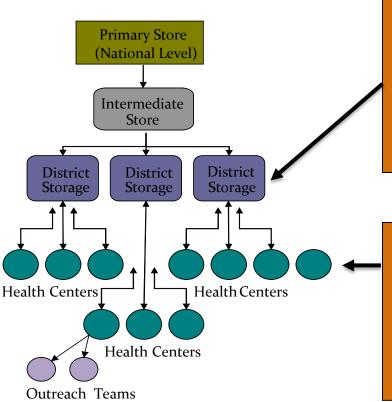
An Example from the Mozambique Vaccine Supply Chain





Challenges in a multi-tier system



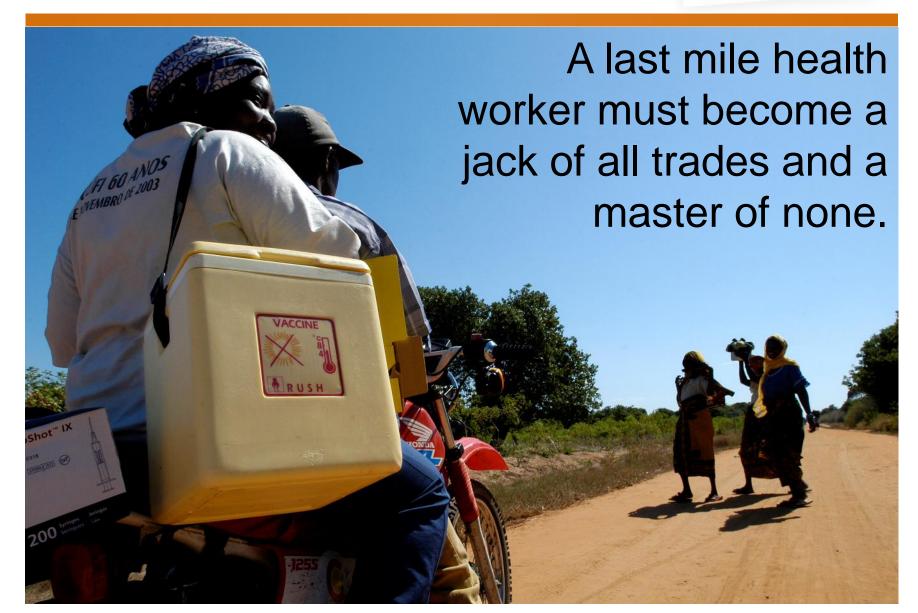


Transport, fuel and personnel not available at the system level where it is needed for distribution.

Health care staff required to fetch vaccines, manage stock, complete requisitions for stock quantities not fully fulfilled.

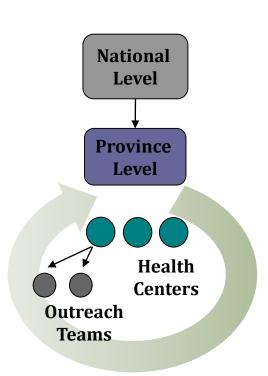
Results in ad-hoc distribution, disempowered health workers, and missed opportunities for care.





System Change: Informed Push with Dedicated Logistician and Transport Loops





- Dedicated logistician responsible for:
 - Distribution of vaccines based on realtime consumption data
 - Supportive supervision at health centers
 - Preventive maintenance of cold chain
 - Ensuring quality of data

In four provinces in Mozambique, this system consolidates supply chain functions at the level where available resources can be focused.

Comparison of the Two Systems



Multi-tier Ad-hoc Model

Description

- HWs responsible for picking up vaccines & supplies from the districts
- Health centers closed during this time instead of providing services
- HWs face challenges in securing transport to make vaccine run
- Difficulty maintaining vaccine temperature during transport

Personnel

Task diffused to 134 workers

Personnel Costs

- \$75,482.23 (\$40,106 more)
- Per diems for many HWs
- Personnel costs are 28% of vaccine logistics costs

Staff Days/Month

348

Results

- 498,624 vaccines delivered (per year)
- \$1.50, total cost per dose of vaccine delivered
- 70% DTP-3 coverage rate

Informed Push Model

- Dedicated teams focused on logistics, cold chain, inventory management, supportive supervision, data collection
- Responsibility, accountability, authority assigned to small dedicated team, instead of being diffused among all HWs
- Frees up HW time to focus on patient care

Task consolidated to 6 workers

- **\$35,376**
- Negotiated per diems for small number of full-time distribution workers
- Personnel costs are 12% of vaccine logistics costs

138

- 889,152 vaccines delivered (per year)
- \$1.18, total cost per dose of vaccine of delivered
- 95.4% DTP-3 coverage rate
- > The additional 210 staff days required to run the Ad-hoc Model falls entirely on the HWs
- The Informed Push Model reallocates this time to HWs providing healthcare rather than collecting supplies and filing stock inventory reports

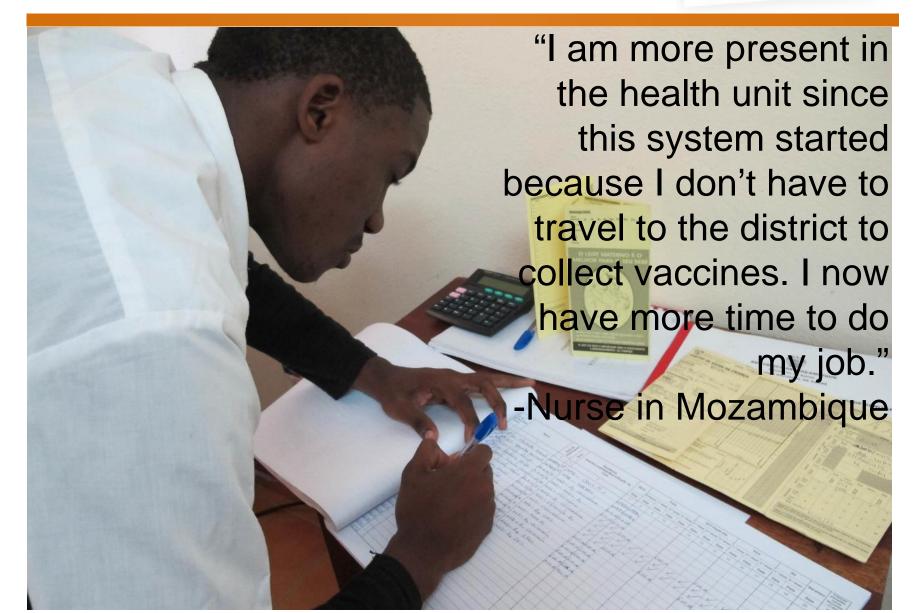
Source: VillageReach cost study comparing two provinces, each with ~100 health centers

The Benefits of a System + Dedicated Logistician



- More efficient use of human resources
- Creates opportunities for SCM specialization of a few dedicated personnel instead of diffused through the system
- Placement of dedicated logistician matches the reality of the system and where needed resources are more likely available
- Frees up health worker time to focus on patient care





The PtD Board:



















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