

Public Health Supply Chains: Shifting focus from the commodities to the patients

by

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Outline

- Commodities focused approach
- Gaps
- Patient focused approach
 1. Redefinition of parameters
 2. Design/Implementation of interventions
 3. Performance Monitoring
 4. Technology

Introduction

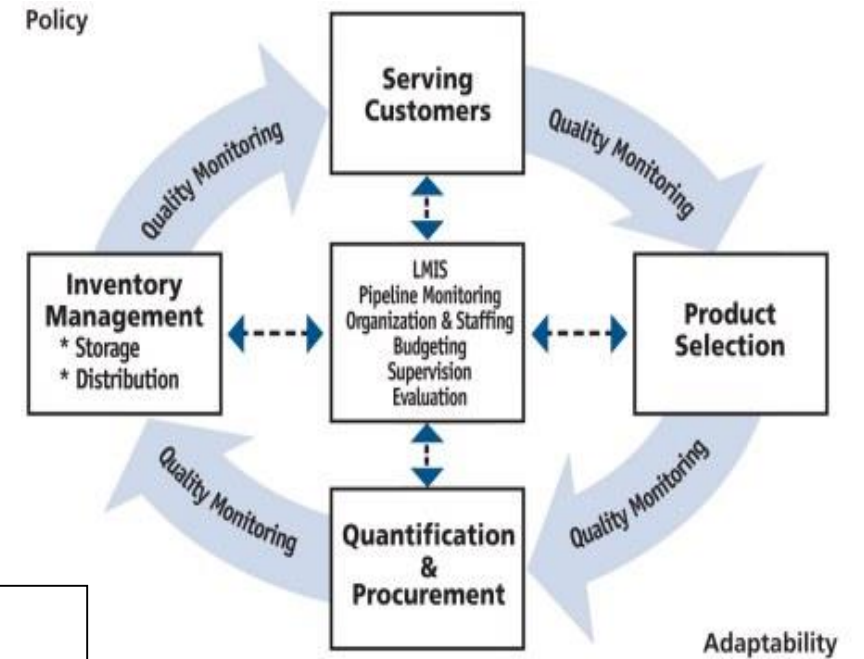
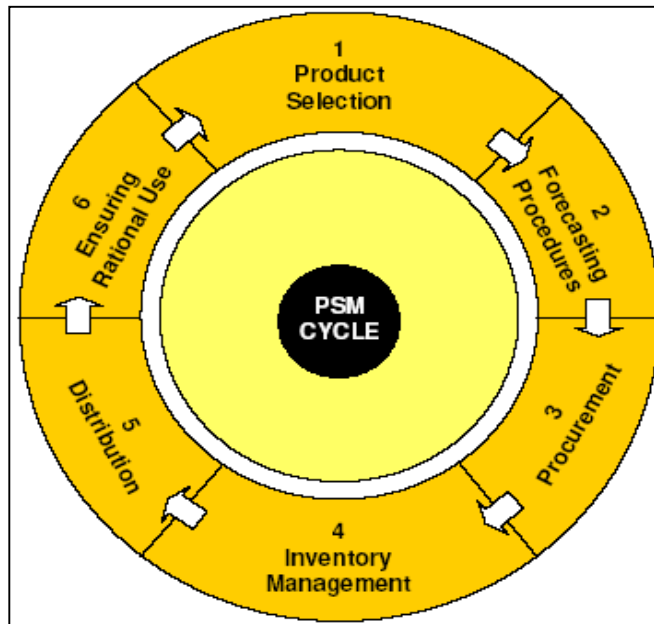
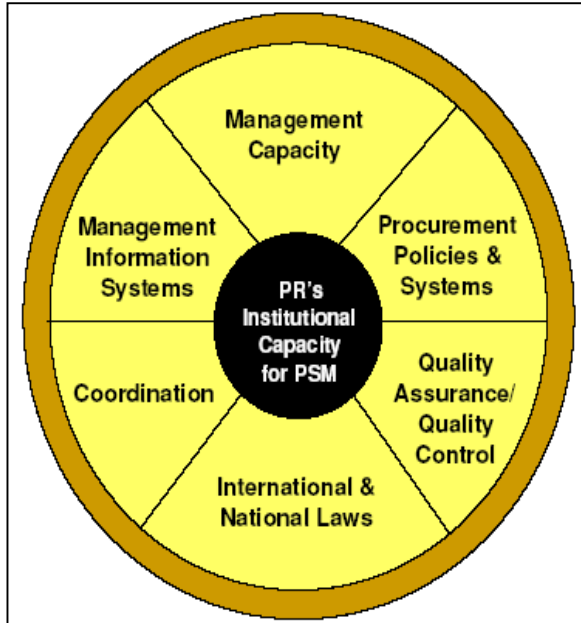
- Public Health Supply Chains currently focuses on ensuring that medicines, Lab reagents & consumables, rapid diagnostics test kits and other commodities are available at the facility for use.
- This practice **dissociates itself from the patient** and focuses on the availability of the commodities at the health facility.

HIV/AIDS commodities

- Rapid diagnostics test kits
- Lab reagents and consumables
- Drugs ARVS/OIs
- DBS kits
- Laboratory equipment
- Condoms and Lubricants

About 45 to 50% of grants is used for procurement of commodities

PSM/Logistics cycle



Source: TGF, JSI

Gaps

- Drug resistance
- Treatment failure
- Patient attrition
- Stock outs
- Expiries
- Evaluation of Public health supply chains
- Funding
- Poor Patient engagement
- Lack of Strategic leadership for SCM
- Scarce HR, Skills and expertise
- Paucity of data
- Weak evidence base
- Incomplete data

Resistance

Tenores study:

1926 patients from 36 countries in Europe, Latin and North America, Sub Saharan Africa and Europe

Result:

drug resistance in a high proportion of patients after virologic failure on Tenofovir containing first line regimen across low income and middle income regions.

This study was carried out by the TenoRes group and published online in Lancet (January 28 2016)

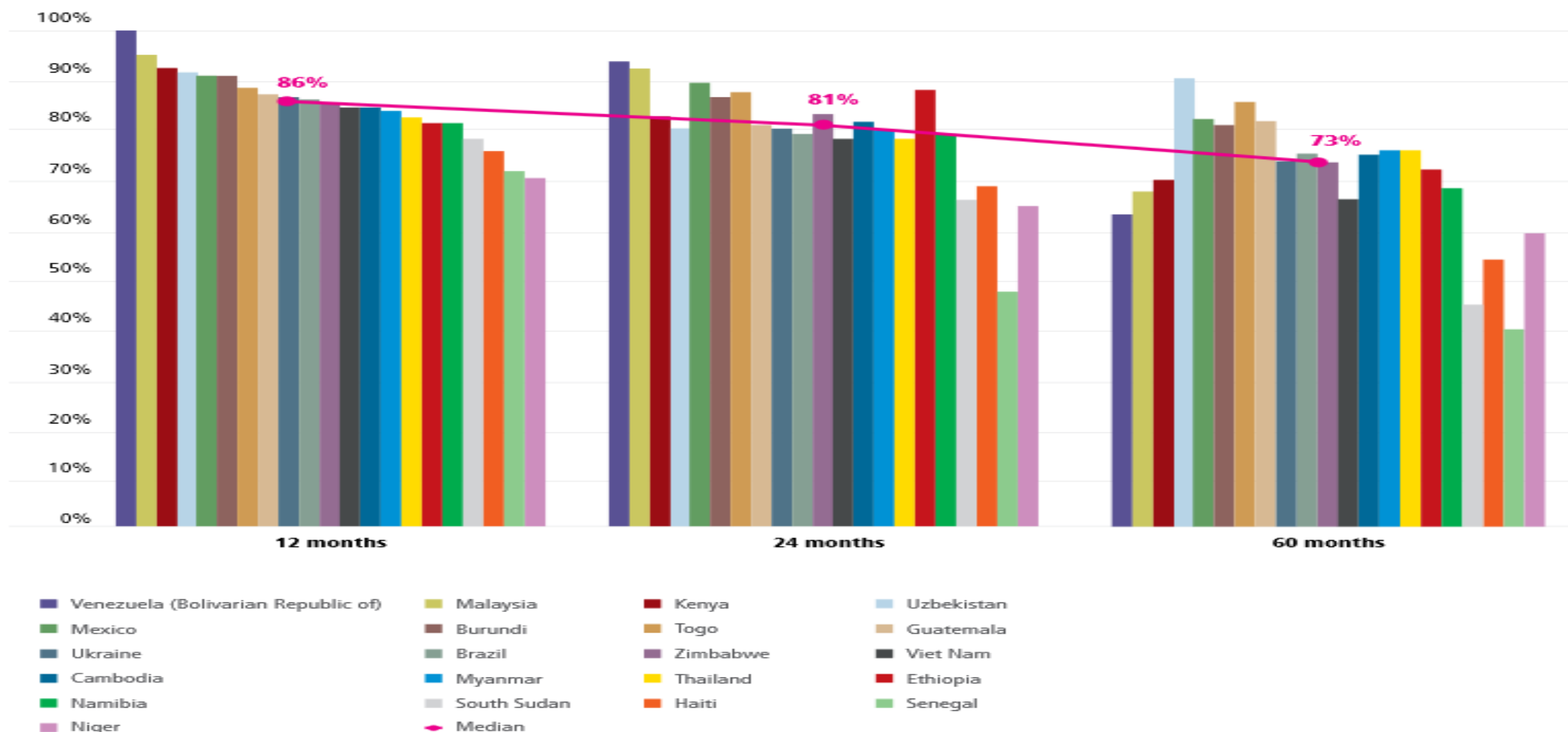
Treatment failure

Systematic review titled: 'Rates of emergence of HIV drug resistance in resource limited setting'

- Multi-class drug resistance increased steadily with time on ART
- Patients in countries in which ART had been available for ≥ 5 years were 1.7 times more likely to have transmitted drug-resistance than those living in a country where ART had been available for < 5 years ($p < 0.001$)
- The reported prevalence of transmitted HIVDR was 5.7% (233/4069) in Africa, 7.6% (160/2094) in Asia, and 8.4% (76/900) in Brazil
- They recommend that patients are monitored routinely so as to identify treatment failure through routine measurement of viral load to achieve the 90-90-90 target.

(Stadeli & Richman 2015)

Fig. 5.10. ART retention rates (%) at 12, 24 and 60 months reported by selected low- and middle-income countries, 2013



Source: Global AIDS Response Progress Reporting (WHO/UNAIDS/UNICEF).

Retention

- Retention rate at 12 months – 75%
- Retention rate at 24 months – 67%
- Retention rate at 60 months – 46%

2015 data from MoH RSS

“patients must be supported to adhere to therapy and to stay in care. Health systems must develop robust ways to monitor the effectiveness of their ARV programs”

(Peter Godfrey-Faussett, Senior Science Adviser, UNAIDS 2016)

Proposed Solution: A Patient focused approach (PFA)

A more robust Public Health Supply Chain Management (SCM) system with the patient as its central focus is required and this can be achieved by a new thinking in the way we:

1. Define parameters in SCM
2. Implement interventions
3. Monitor performance and
4. use technology

PFA 1: Redefining parameters

Six rights

Commodities focused approach:

To supply the right goods, in the right quantities, in the right condition, to the **right place**, at the right time, and at the right cost.

Patient focused approach:

To supply the right goods, in the right quantities, in the right condition, to the **right patient**, at the right time, and at the right cost.

Group work

Define the following terminologies using a patient focused approach:

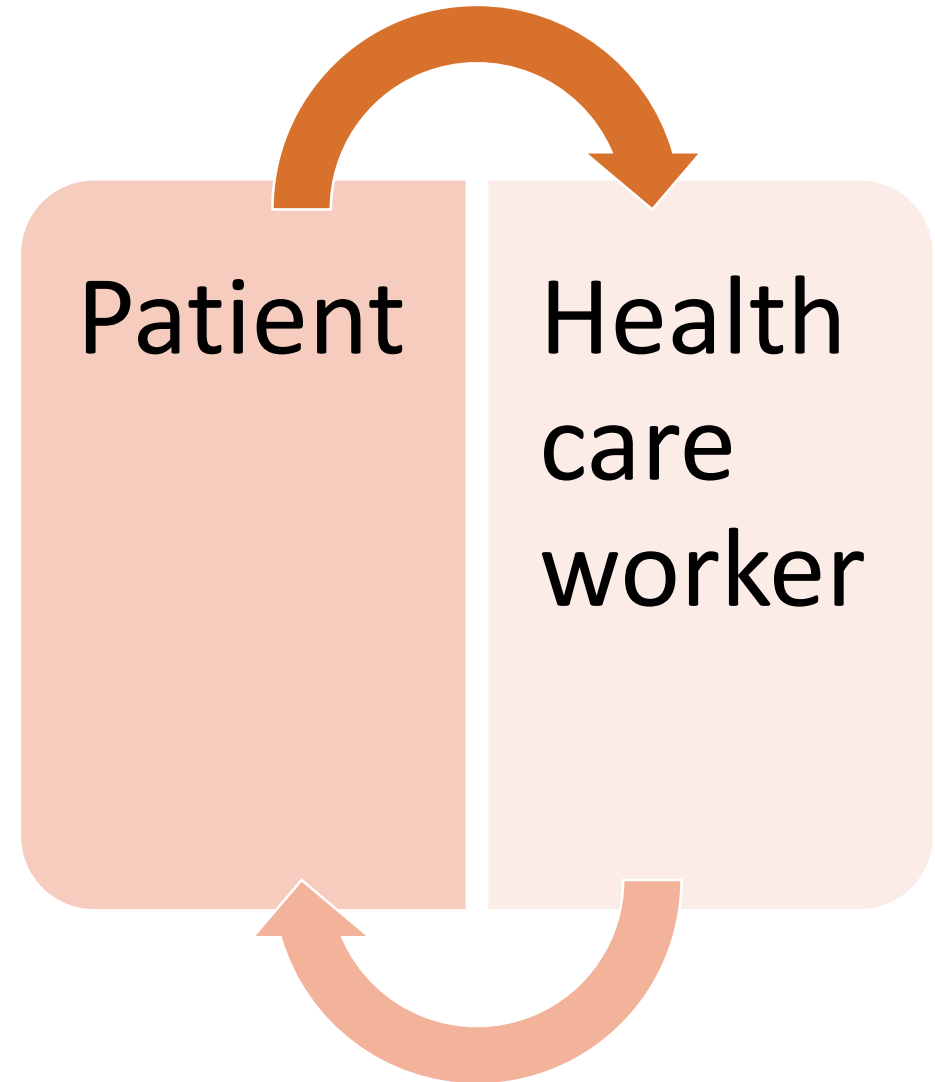
- Last mile delivery
- Consumption
- Stock outs
- Lead time

Terminology	Commodities focused approach	Patient focused approach
Last mile delivery	Is the delivery of commodities to Health facility	Is the delivery of commodities to the patient
Consumption	Quantity of commodities dispensed to patients	Quantity of commodities taken by patients
Stock out	There is no commodity in the health facility	The patient has no commodity
Lead time	Time between when new stock is ordered and when it is received and available for use	Time between when new stock is ordered and when the patient receives the drug

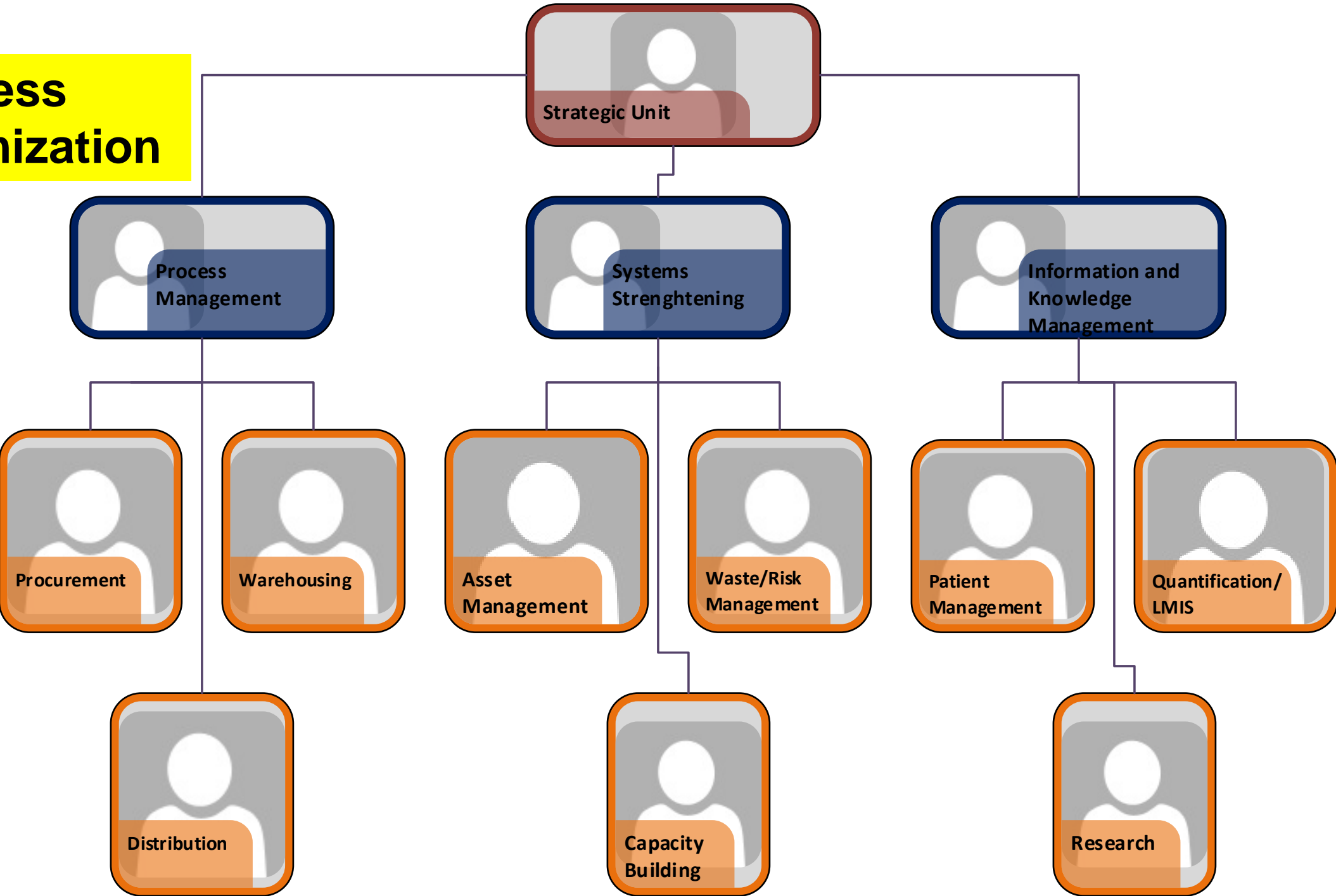
PFA 2: Implementing Interventions

Patient engagement

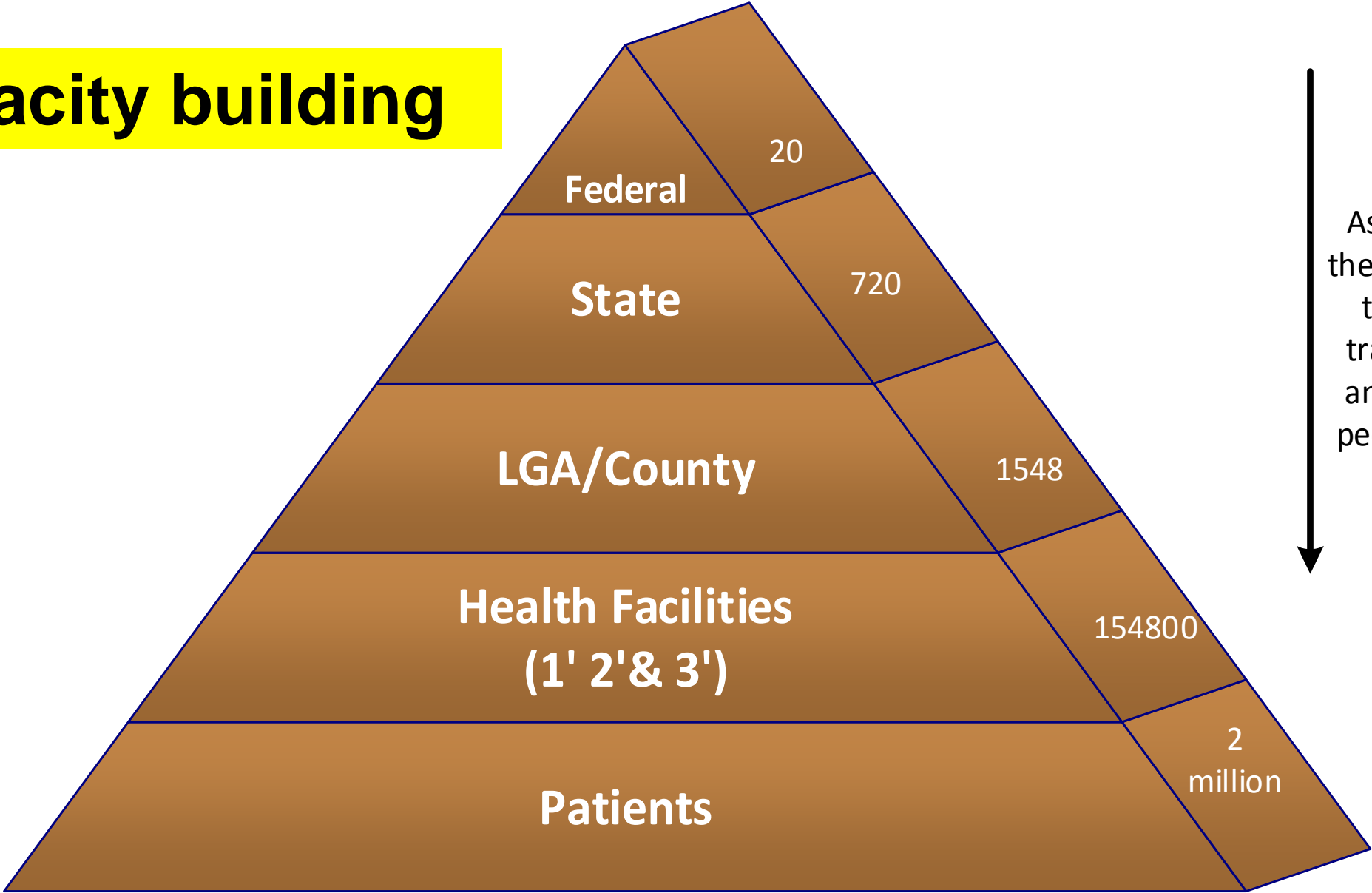
- Focus is on Patient **taking** the drugs and not on the patients **receiving** the drugs - **Home based approach**
- Expand the scope of the patient to become a member of the treatment team
- Shorten and ultimately eliminate loop between patients and Health care workers



**Process
optimization**



Capacity building



As you move down the supply chain from the federal level, training needs vary and the number of people to be trained increases

PFA 3: Performance monitoring

Monitoring and Evaluation of PSMS: EWIs (WHO)

1. Selection: %ARVs, TB, Malaria items received that are in national STG.

2. Use: % of patients receiving ARV, TB in line with national STG.

3. Forecasting: % quantities of medicines received VS quantities planned to be procured

4. Consumption: % quantities consumed VS quantities available for consumption

5. Price: Ratio between national median price and the international reference value(GPRM)

6. Supplier's Performance : % of orders delivered in full and on time as agreed per supplier *

PSM EWIs contd.

Only 17% of the indicators focus on patients!

- 7. QC: % ATM batches tested that met international quality control standards.
- 8. Distribution: % H. Facilities that received all orders in full and on time *
- 9. Inventory: % H. Facilities that submitted inventory control reports *
- 10. Loss: % of medicine quantities lost out of total quantities available for use.
- 11. Stock mgt: % H. Facilities that placed orders while stock on hand was below minimum stock level*
- 12. Availability: % H. Facilities that had a stock out of one or more required medicines.

[Source: http://www.who.int/hiv/pub/amds/monitoring_evaluation/en/](http://www.who.int/hiv/pub/amds/monitoring_evaluation/en/)

Considerations

- Too many indicators?
- How about output, outcome and impact level indicators?
- Data not regular/complete?

Group work: PFA indicators

Recommendations

- Revise PSM indicators to tie performance of PSM systems to output and outcome level indicators
- Strengthen routine monitoring of PSM systems
- Measure and publish performance indicators e.g the global PEPFAR dashboard
- Conduct operations research, cohort studies and RCTs
- Evaluation of PH supply chain systems
- Dedicate funds for research

PFA 4: Use of Technology

Activity

In what ways can technology be used to drive the patient focused approach?

Write your ideas on the flip charts

How can technology help?

- Patient involvement
- Real time data entry
- Task shifting
- Availability of data for quantification
- Dispensing of drugs at community level
- Close gap between health care providers and patients

Avor pataki!!!

(Thank you very much in Ebira Language)