Workforce Deployment for pharmacy service, store and auditing
Using the APTS System in Ethiopia
Presented by the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project in Ethiopia
Background

• Auditable Pharmaceutical Transaction and Services (APTS) is an innovate Ethiopian system that institutes and is enacted by regulation, directive and guidelines.

• APTS establishes human resource deployment based on workload analysis.

Before APTS in Ethiopia:

• Deployment of human power (HP) was not based on workload analysis

• Resulting in pharmacy HP shortages and difficulties in
  • Controlling medicine availability
  • Reducing wastage rates
  • Serving patients properly
HR challenges

- Undefined roles and responsibilities
- Bin ownership:
  - Overextended physical inventory (PI) period
  - Inaccuracy of PI
- Counter layouts made service difficult for all patients, especially mothers carrying children

- Difficulties in dispensing medicines and counseling patients

Why?
- Shortage of staff and dispensary counters
- There was no collective responsibility – this also led to theft & pilferages
APTS has 5 Result Areas
Method

- National cross-sectional study was conducted in 26 hospitals (HLs) selected from all APTS sites
- The practice of workforce deployment assessed for:
  - supply chain in HLs
  - service based on APTS workload analysis
- Study was approved by MOH

For the assessment:

- The 26 hospitals were selected purposefully from all regional states of Ethiopia
- APTS is implemented in 246 of 363 general HLs (70%) and 25 of 26 federal HLs (96%)
- The data was collected & analyzed using MS Excel and SPSS v.23
Results-1

Due to APTS, proper human power deployment is now used to:

• Request medicines from store/supply chain
• Conduct accurate and fast PI
• Perform stock status analysis (SSA) and resource sharing (RS) from facility to facility
• Control products by bin ownership
• Increase medicine availability and reduce wastage
Results-2

• APTS was used to analyze the workload at all 26 sites and determine how many positions were needed to provide adequate service and perform SC responsibilities

• With this number in hand, and new APTS regulations and guidelines in place, the facilities achieved the following:

Due to APTS, 100% of pharmacists graduated in Ethiopia are employed.
Discussion - workload analysis

- APTS implementing hospitals now deploy HP based on workload analysis

- HP deployment factors in:
  - Number of dispensary counters
  - Quantity of medicines and shelves
  - Threshold for patients per day per pharmacist at outpatient pharmacy departments (OPD), which APTS establishes as max 48

- Due to APTS regulations on proper staffing, clinical pharmacies can only have 35 patients per day/ per pharmacist at primary HLs; 30 at general HLs; and 25 at special HLs.

Reference for APTS guidelines: Chapter 10: Pharmacy Service; guideline (google)
APTS has increased performance and satisfaction-
Metric: mothers carrying children from worst to the best sites

Satisfaction rate of interviewed patients and SC workers showed improvement: from 51% before APTS to 91-100% after APTS

Read more: https://chemonics.com/impact-story/attention-to-detail/
Impact on supply chain performance

- After APTS, PI of dispensaries now ranges from 0.33 to 1 day
- Availability of medicines at APTS sites increased from 80% to 100%
- Store PI went from up to 16 days to 1-4 days
- Average wastage rate improved:
  - Before APTS < 5.1%
  - After APTS <2%
  - **Why?** HP deployment & bin ownership!

Read more here: [https://chemonics.com/impact-story/attention-to-detail/](https://chemonics.com/impact-story/attention-to-detail/)
**Lessons learned and next steps**

APTS principles of proper human power (HP) deployment can:

1. Increase availability and reduce wastage rate
2. Bring best quality of service improve patient satisfaction

- Human power deployment based on workload analysis are very important
- Due to the assessment results, the APTS system will continue with much government support in the next years.
- And all regional states will continue to use evidence-based workforce deployment (using the approved directives/guides)
- The APTS system should be considered for expansion across Ethiopia and could even be considered for other countries -- *In Africa? Europe? Americas? How?*
APTS implementation inaugurations by MOH, RHB and GHSC-PSM (2019, 2020, 2021)

Ribbon-cutting by MOH and First Lady of Ethiopia

Inauguration of APTS
Pharmacy design, 100 years ago
Addis Ababa, Ethiopia

Pharmacy design based on APTS principles in 2021