



CHAI'S Approach for the ARV supply chain

Agenda

CHAI's work in the region

- Summary of CHAI's work in Latin America

ARV supply chain

- Summary of the supply chain
- Tools - approaches

Examples of implementation

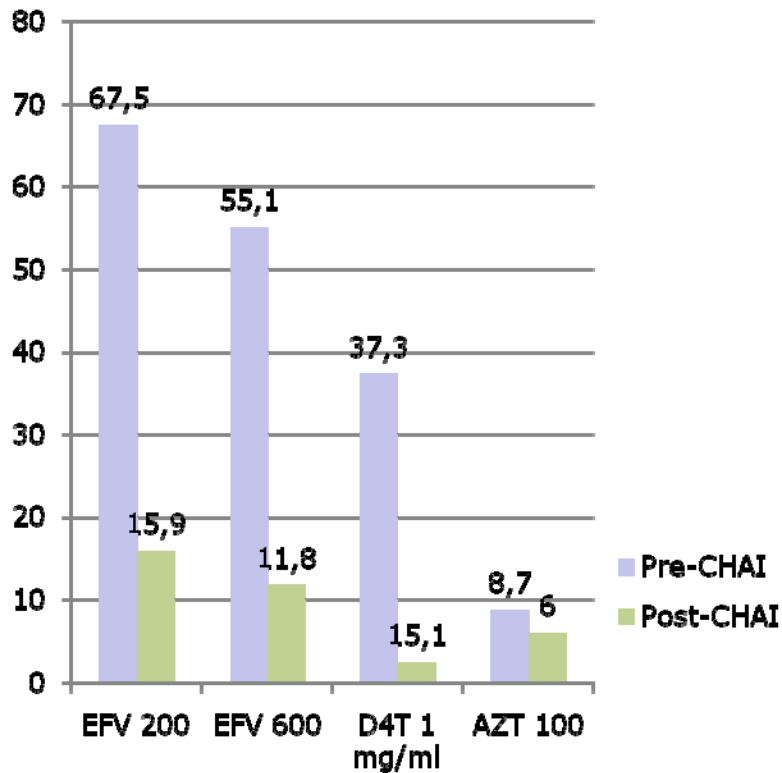
- Discussion of supply chain program implementation
 - Country experiences
 - Challenges and common bottlenecks

CHAI's work helped reduce the price of ARVs in the region

ARV prices in Central American before and after CHAI

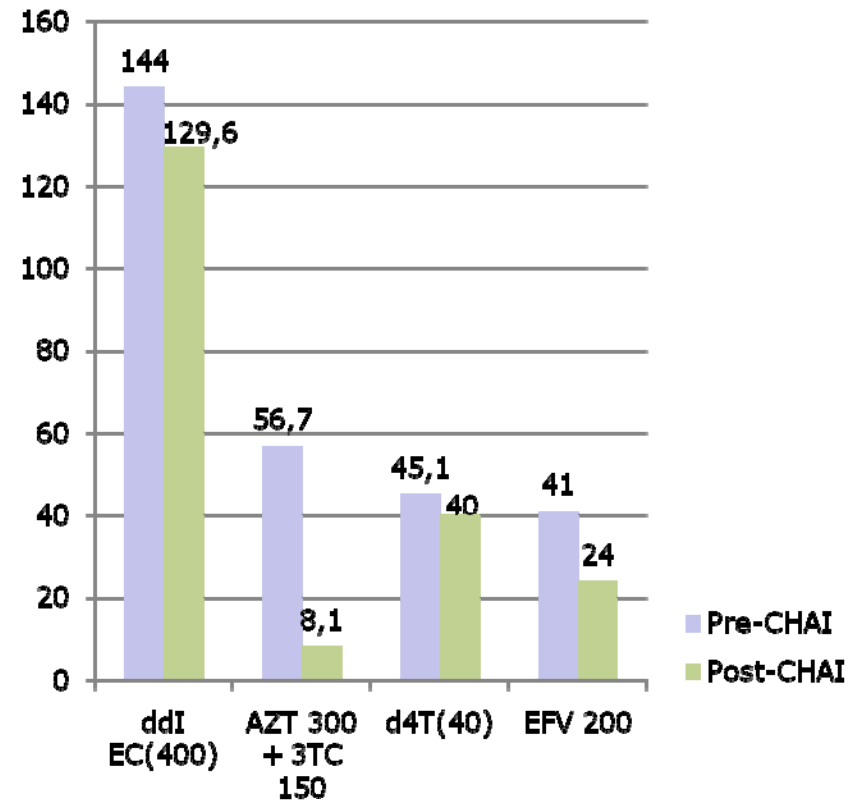
Country 1

Average price per bottle
(US\$)



Country 2

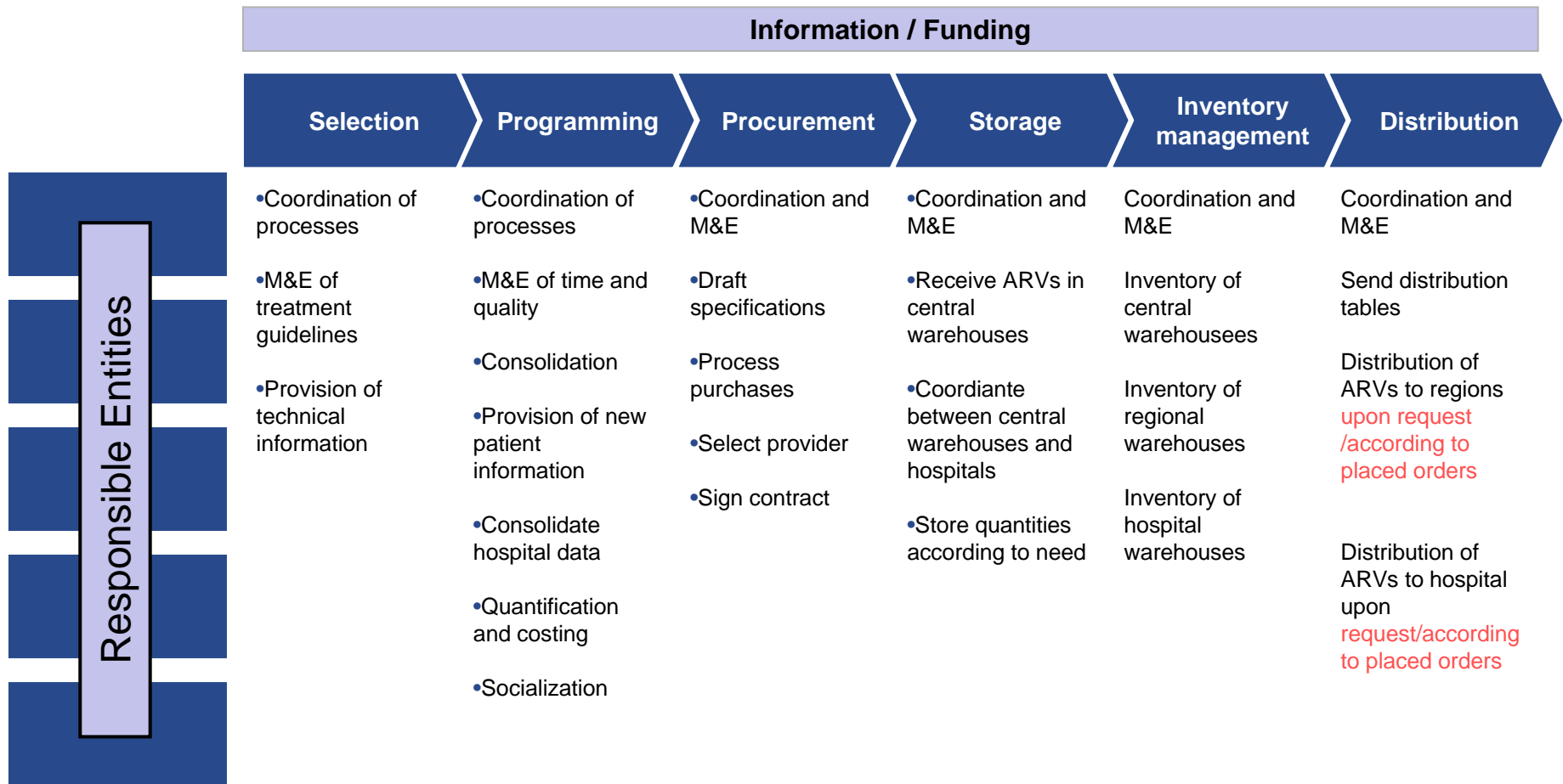
Average price per bottle
(US\$)



Note: average prices for each medication reported by country in the last year before having access to CHAI's prices and in the first year with CHAI prices



The supply chain has several step, each with key activities



The process must be supervised and monitored by a central entity

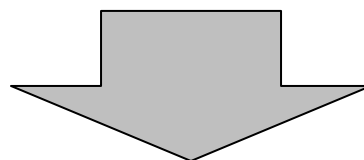


Medication selection is the first step in the supply chain



Selection

- M&E of treatment guidelines
 - Treatment guidelines should be updated every 2 to 3 years, or when there are important changes or updates in medications or international guidelines
- Coordination of processes
 - The Ministry of Health generally handles the updating of guidelines
- Provision of technical information
 - Clinical experts provide information about medications



CHAI facilitates the updating processes and selection analysis for medications

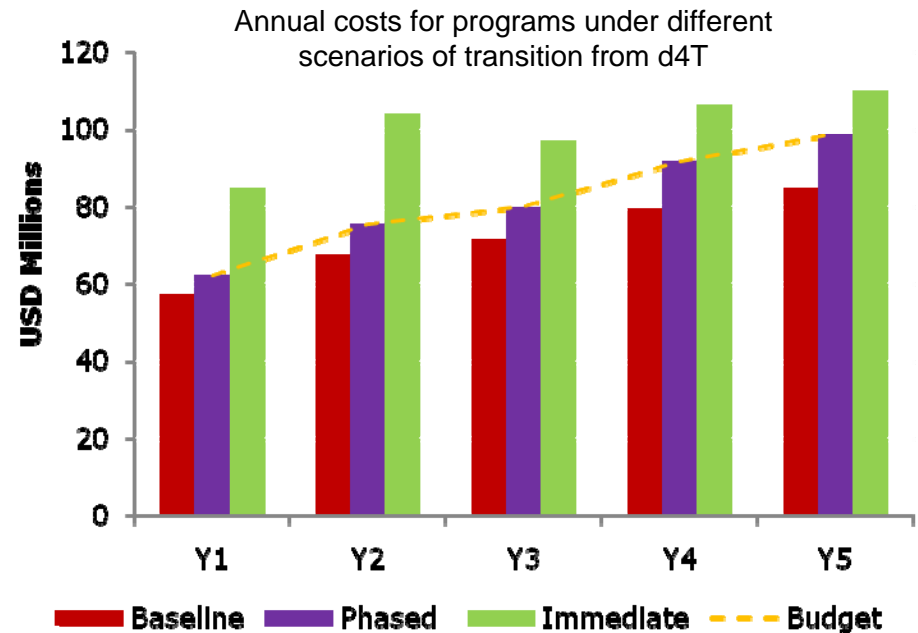
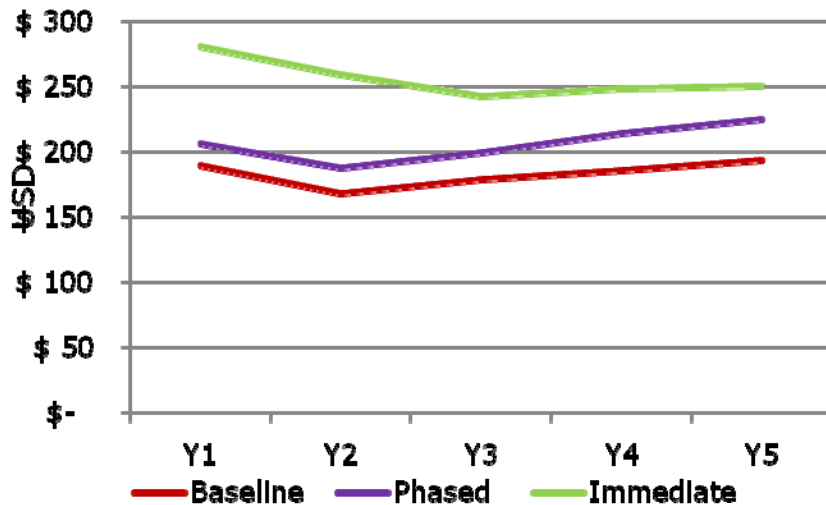


Cost Modeling of guidelines adults/adolescents



- What are the financial implications of migrating patients from d4T to TDF or first-line regimens based on AZT?
- How many more patients would be eligible to start treatment if the initiation criteria changed from CD4 < 350 to CD4 < 200?
- What would be the impact with regards to cost if new policies were adopted gradually vs immediately?

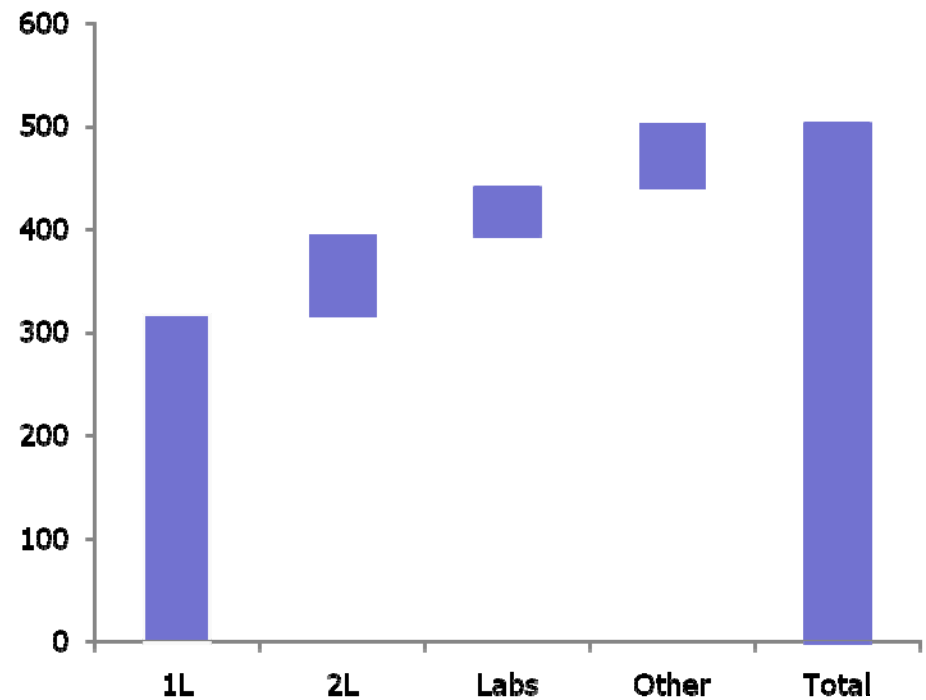
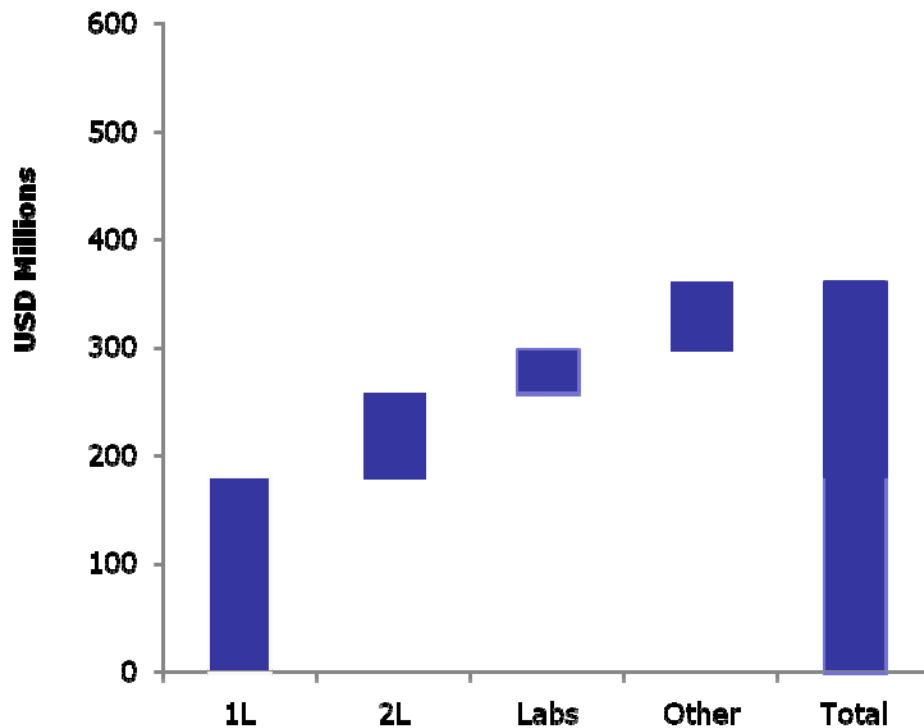
The scenarios of cost per patient per year of transitioning from d4T includes among other things medicines, laboratories



Tools provide detailed results of possible scenarios



Describes a fast drop in program costs for the use of d4T without a change in policy



... Budget planning is essential for transitioning to more expensive first-line regimens

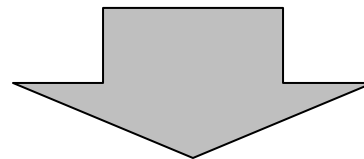


Purchase programming requires information from various sources



Programming

- Annual and quarterly programming
- Coordination of processes
- M&E of time and quality
- Provision of new patient information
 - It is important to have updated information on the number of new and existing patients for forecasting purposes
- Consolidation of information
 - Consolidating information is done at the central level to forecast medication needs for the entire country



CHAI forecasting tool consolidates and processes the information, arriving at a forecast of needs

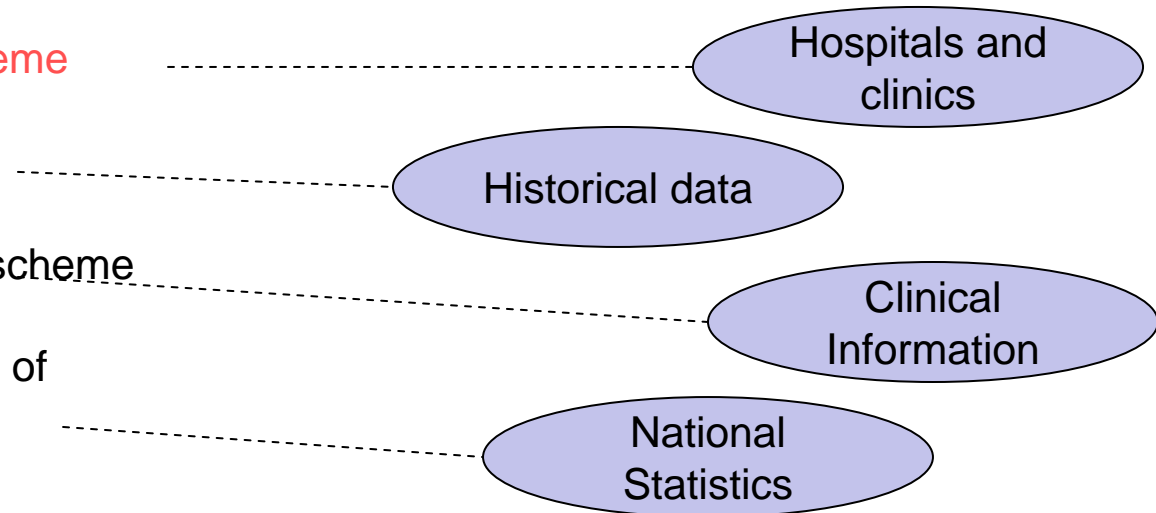


CHAI's forecasting tool uses patient information and **schemes** (or formulations???)



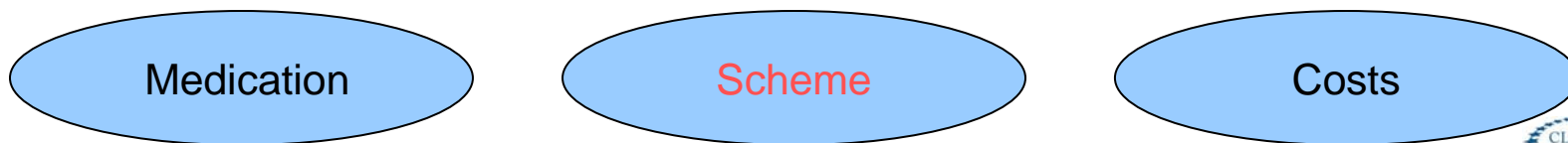
Inputs

- Number of patients by **scheme**
- Dropout rate
- Percentage of changes in scheme
- Forecast growth of number of patients



Outputs

- Forecast by:

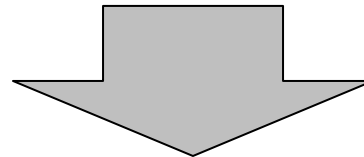


The procurement process involves several different entities



Procurement

- Coordination and M&E
- Draft specifications
- Process purchases
- Select providers
 - Providers must be chosen based on cost and on their capacity to delivery medication on time
- Sign contract



CHAI provides support during the negotiation process and with technical issues pertaining to the bidding process

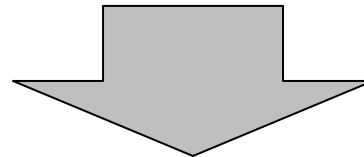


Appropriate storage conditions for medications is important



Storage

- Coordination and M&E
- Receive ARV in central warehouses
 - Ensure that the warehouse has the appropriate conditions for the needed ARVs
- Coordination between the central warehouse and hospitals
 - Receive requests for ARVs
 - Schedule delivery of medication
- Stock quantity according to need



This activity falls under central warehouses, CHAI advises on technical aspects of process management

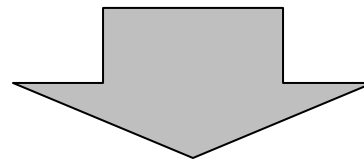
The inventory tool coordinates the country's current stock and need



Inventory Management

- Coordination and M&E
- Inventory of central warehouses
- Inventory of regional warehouses
- Inventory of hospitals' warehouses

CHAI's Inventory Monitoring tools coordinate the information from central, regional and hospital warehouses in order to have information regarding the country's stock



CHAI's inventory tool helps prevent medical stock shortages and levels stocks between hospitals



The inventory tool is being used in Ecuador



II Trimester 2009

III-IV Trimester 2009

IV Trimester 2009

IV Trimester 2009 - present

System design

- Inventory system for central warehouse and all primary care centers
- The country's specific needs were taken into account

Visits to warehouses and clinics at the national level

- Nation-wide trainings were held for clinicians and technicians from almost all hospitals
- Feedback from clinicians and technicians was included in form design

System launch

- The systems was used around the country
- Reinforce system implementation

Monitoring and evaluation of system's success

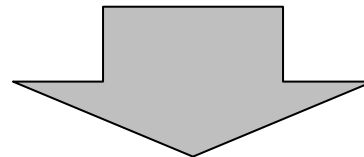
- The system continues to be monitored and improved
- User comments help improve the system

Distribution of ARVs can be coordinated at the central level



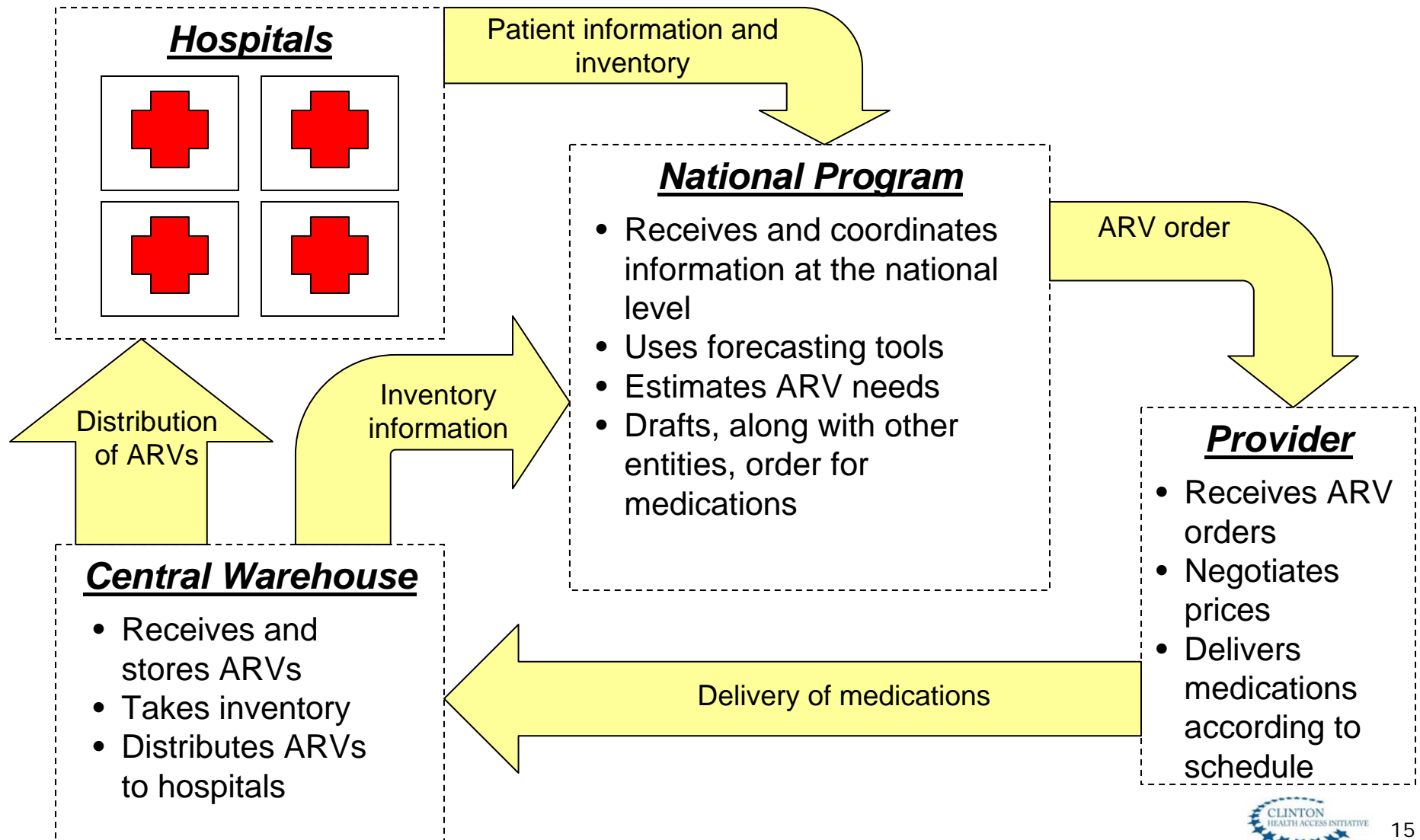
Distribution

- Coordination and M&E
 - Distribution coordination is performed in advance to ensure that the central warehouse and each recipient have a clear understanding of their respective responsibilities
- Send distribution schedules
 - Each hospital or clinic must understand the distribution calendar
- Distribute ARVs to regions and hospitals upon request
 - Distribution of ARVs from warehouses should be based on specific timely requests



Distribution is performed in coordination with central, regional and hospital warehouses

CHAI developed an approach for the chain's primary segments



Main bottlenecks in the supply chain



	Selection	Programming	Procurement	Storage	Inventory Management	Distribution
Challenge:	<ul style="list-style-type: none"> • Failure to adhere to guidelines results in the proliferation of multiple regimens 	<ul style="list-style-type: none"> • Incomplete patient information and schemes 	<ul style="list-style-type: none"> • High prices • Failure to meet delivery schedules 	<ul style="list-style-type: none"> • Inadequate conditions • Inefficient management of expiry dates 	<ul style="list-style-type: none"> • Unwillingness / lack of resources to employ the system 	<ul style="list-style-type: none"> • Complex distribution process • Insufficient resources for product distribution • Management of information
Solution:	<ul style="list-style-type: none"> • Raise awareness about the guidelines • Empower central entities to adhere to M&E and guidelines 	<ul style="list-style-type: none"> • Implementation of systems that allow updating of vital information 	<ul style="list-style-type: none"> • CHAI prices • Appropriate selection criteria • CHAI support in managing providers 	<ul style="list-style-type: none"> • Investment in infrastructure • Implementation of FIFO systems 	<ul style="list-style-type: none"> • Raise awareness of the immediate benefits of improving efficiencies 	<ul style="list-style-type: none"> • Review Process • Standardize the management of information