



# Quantification in VMMC

The need for planning

**Juan Jaramillo**  
**VMMC Program Manager**



# Question

How many liters of gasoline/petrol is your family going to purchase during 2013?



PEPFAR  
Implementing Partner

# Analysis of the forecast

When calculating the estimate of gasoline/petrol to be bought, did you take into consideration any of the following?:

1. Additional traveling during specific times of the year?
2. Using multiple cars with different gasoline consumption?
3. Number of drivers available in the house?

# How is forecasting Gasoline/Petrol similar to VMMC commodities forecasting...

1. Additional traveling during specific times of the year?  
High throughput in VMMC Campaigns
2. Using multiple cars with different gasoline consumption?  
Choice in type of instruments (eg. Disposable, diathermy)
3. Number of drivers available in the house?  
Medical personnel available for procedures

# Number of commodities for VMMC

More than 50 different commodities needed for VMMC programs:

- Pharmaceuticals
- Additional Essential items (eg. Extra gloves, gauze)
- Infection prevention and waste management supplies
- Emergency items

... it is like estimating in addition to petrol consumption for our car, the amount spent in new tires, oil, air filter, wipers, etc.

**SCMS** 



PEPFAR  
Implementing Partner

# Importance of Quantification

## Underestimating

- Supply shortages
- Expensive emergency shipments
- Program stoppage

## Overestimating

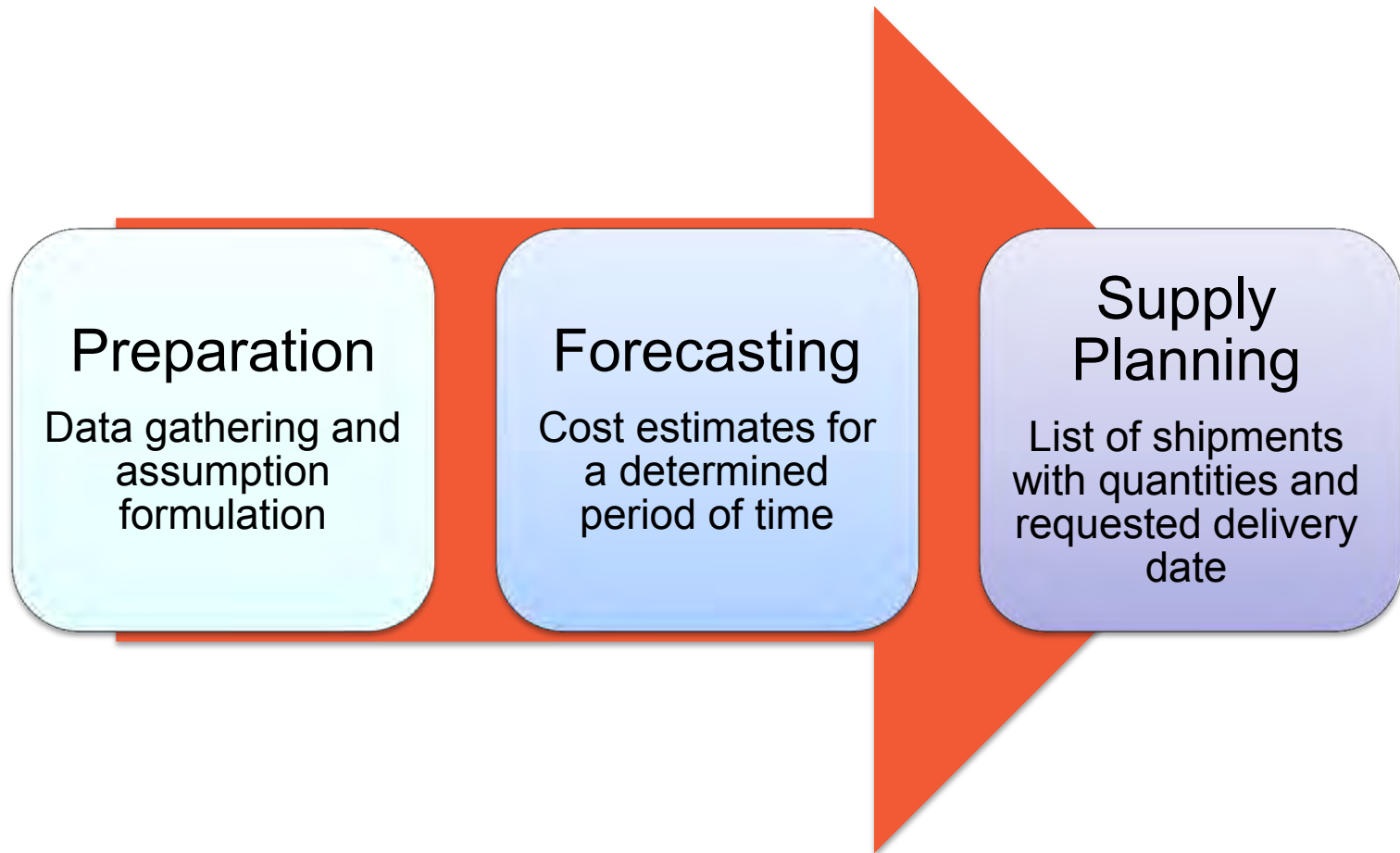
- Tie up precious financial resources and storage space
- Increase the risk of expired stock, waste, theft and diversion

**SCMS** 



PEPFAR  
Implementing Partner

# Activities of Quantification

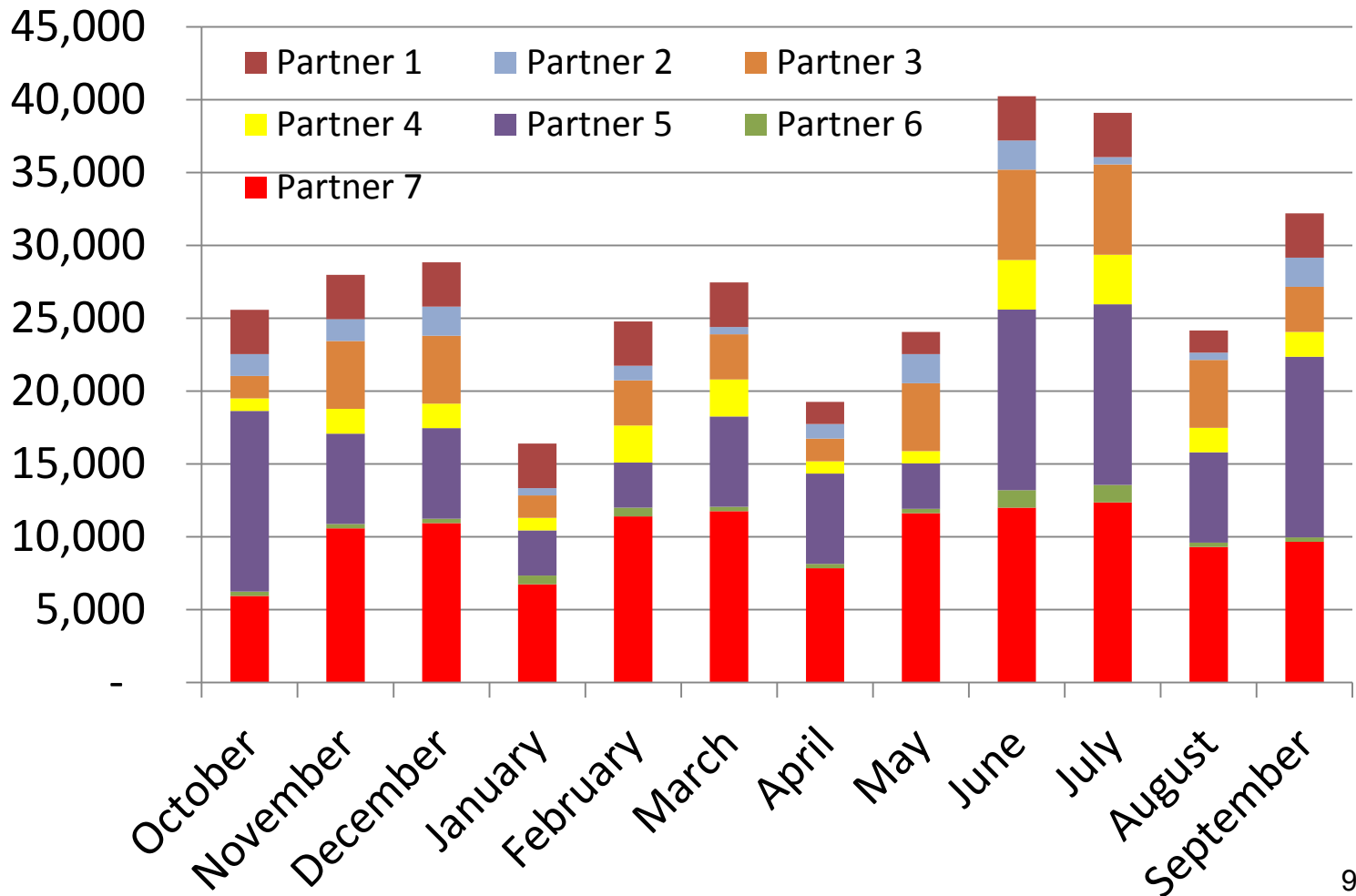


# Forecasting - Assumptions

- Ensure stakeholders reach consensus on assumptions (e.g. rate of scale up for people receiving treatment)
- Requirements
  - Usage/dosage per item as well as presentation (eg. 1% - 2% lidocaine, How many ml per patient if 1% is selected)
  - Modeling of monthly throughput taking into consideration campaigns and their number of patients compared to “regular” months



# VMMC Throughput - Example

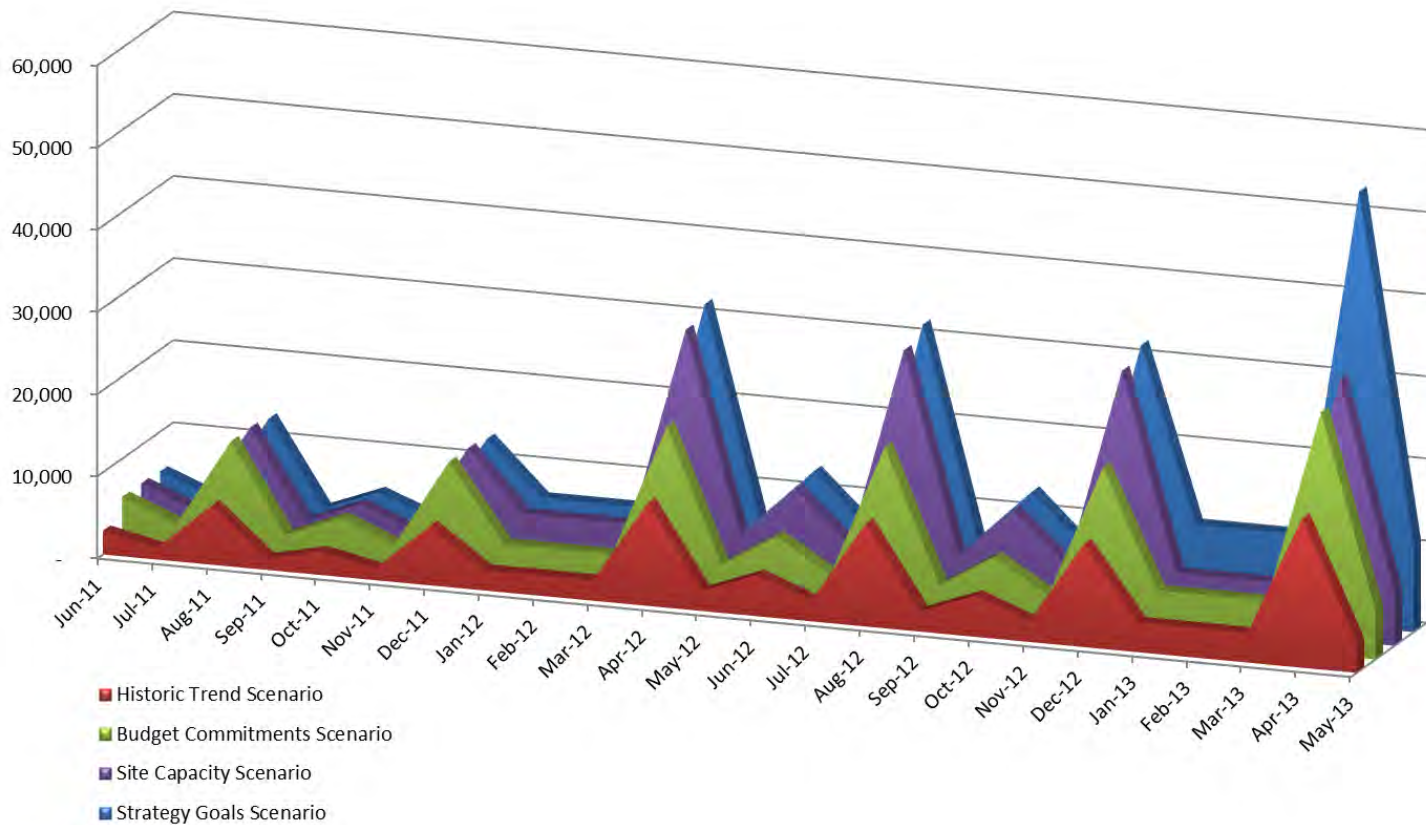


# Forecasting – Constraints / Scenarios

- Constraints
  - Budget
  - Infrastructure Capacity
  - Medical Personnel Availability
- Scenarios
  - Targets (Country, USG, Partner)
  - Historic procedures trend
- Additional modeling based on
  - Percentage of disposable and reusable kits (in the future devices)
  - Percentage of procedures with diathermy

# Forecasting – Scenarios

## Number of MC Procedures during 24-month forecasting for 4 different scenarios



# The need for Supply Planning

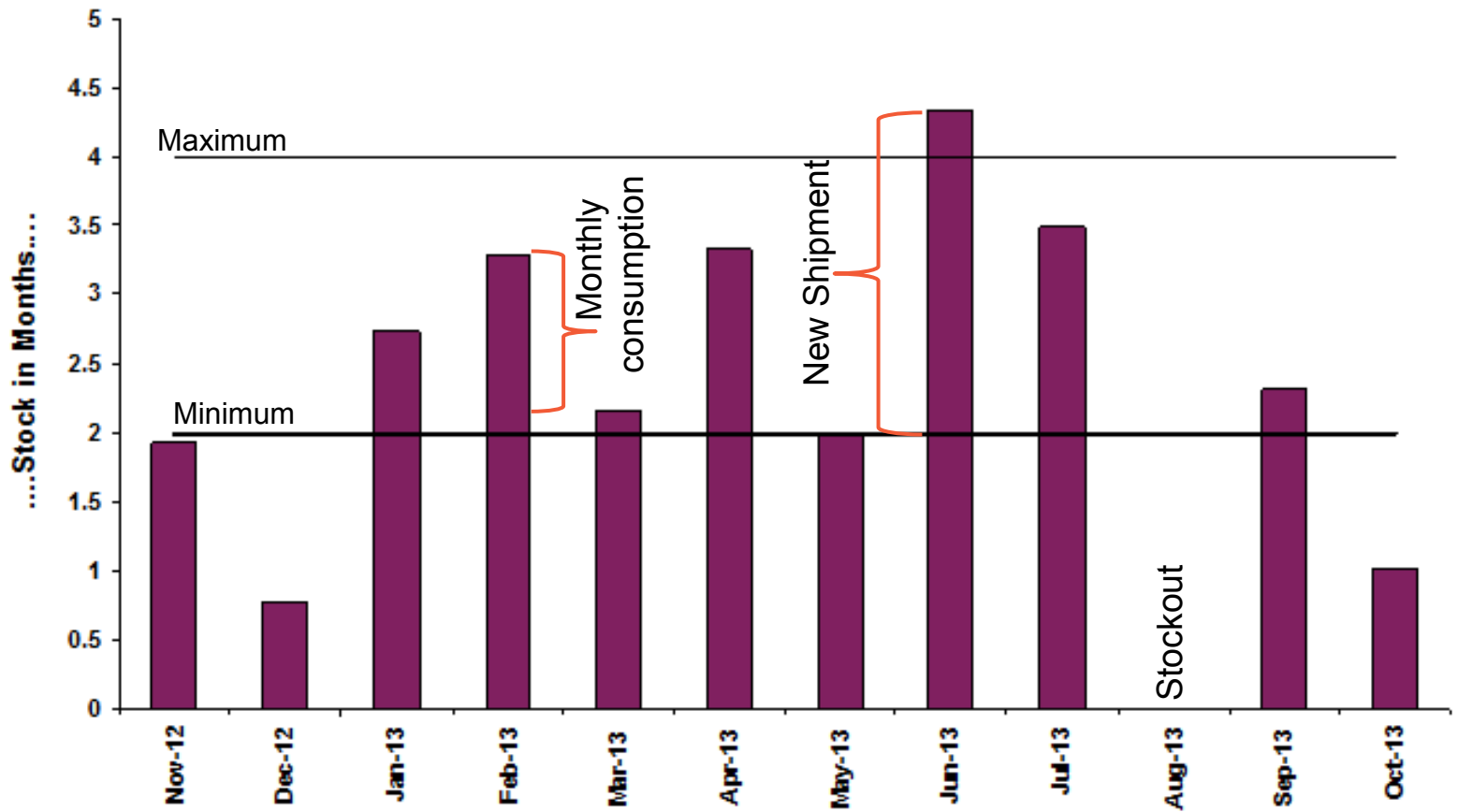
In addition to program consumption estimates, shipments with specific quantities and requested delivery dates need to be planned to guarantee:

- Enough lead time between order placement and requested delivery date
- Prevent product expiries
- Manage available warehouse space



PEPFAR  
Implementing Partner

# Supply Planning – Stock Monitoring



The need is

Planning!  
Monitoring!  
Updating!

SCMS 



PEPFAR  
Implementing Partner