BRUSSELS | 20-22 MARCH 2018

18TH GENERAL MEMBERSHIP MEETING OF THE REPRODUCTIVE HEALTH SUPPLIES COALITION

Visibility and Analytics Networks

Moderator: Gregory Roche, Senior Technical Advisor, JSI Logistics Services
Tuesday, March 20, 2018
Brussels, Belgium

Reproductive Health
SUPPLIES COALITION

#ITSABOUTSUPPLIES #RHSUPPLIES2018

Session Objectives

- Provide an introduction to the concept of visibility and analytics networks (VAN)

- Present country examples of VAN implementation and how to overcome information-sharing and coordination barriers

- Present examples of the work of CARhs and CSP members

Session Agenda

- Overview of VAN concept and application
  - Global and country levels
- Fireside chat with CARhs and CSP members
- Country examples of VAN
  - Indonesia: Dr. Dwi Listyawardani
  - Guinea: Dr. Sano Nagnouma
  - Kenya: Dennis Ndwiga
- Question/Answer/Discussion

Introduction to Visibility and Analytics Networks

The Visibility and Analytics Network…
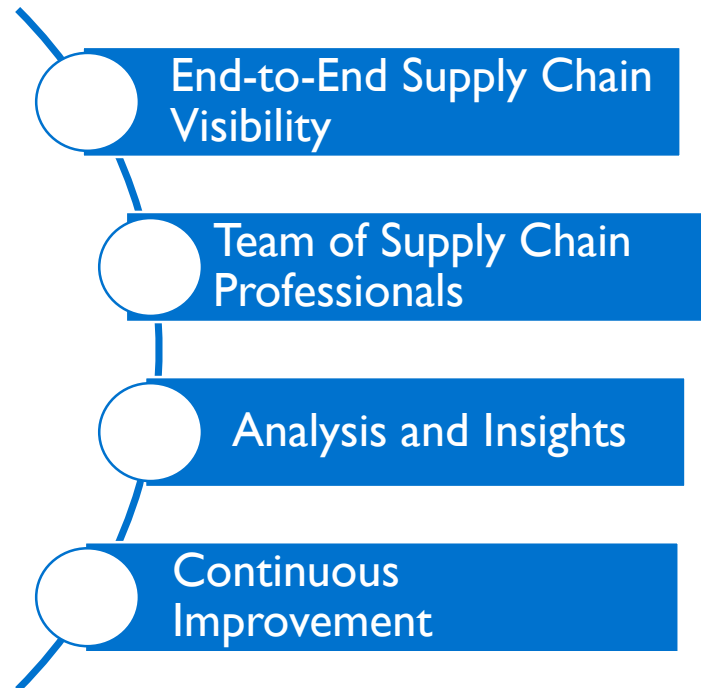
… lays out a vision of the

People

Processes

Technology

& Policies

End-to-End Supply Chain Visibility

Team of Supply Chain Professionals

Analysis and Insights

Continuous Improvement

required to operate a highly effective supply chain.

What is VAN?

- A group of supply chain experts empowered by policy, process, technology and end to end visibility with an objective to make the supply chain more collaborative, aligned, agile and demand-driven.

- Whose central strategic objective is to ensure the availability of the right health commodities when and where the beneficiary needs them.

Source: VAN Project, Blueprint Reference Model

VAN Ideal State

Visibility: Specialized supply chain management roles require visibility of stock on hand, consumption data, delivery data, cold chain data, and much more as VAN matures

Analytics: Analytical processes and IT to make planning recommendations, report and review KPIs, inform decisions based on risk analysis, optimisation studies and simulation

Network: The network of interlocking roles and responsibilities, links National, County, Districts and Facilities in clear terms of what individuals are responsible for, and what technology links support them

Analytical processes with clear purpose...

- Resolving issues in response to alerts
- Supply Chain Planning processes – Demand, Supply & Distribution planning
- Analyzing KPIs and Root Causes of issues Updating 'Master Data', Policies, KPIs
- Data driven optimization studies

VAN... aka Control Tower

"A control tower is
a central hub with the required technology, organization, and processes to capture and use supply chain data to provide enhanced visibility for short and long term decision making that is aligned with strategic objectives."
(Source: Capgemini Consulting)

Combines people, processes, and technology into **shared service centers**

Improves visibility across functions and enables coordinated, data-driven decision-making

VAN Services

- Demand Planning

- Supply Planning & Inventory Management

- Distribution & Transportation Management

- Cold Chain Management

Strengthening Family Planning Supply Chain Systems in Indonesia

Dr. Dwi Listyawardani

Deputy of Family Planning & Reproductive Health

National Population and Family Planning Board (BKKBN)

Background

CENTRAL

↓

34 Province Warehouses

↓

514 District Warehouses

↓

17,000 Health Centers & Hospitals

↓

64,000 Private midwives & FBOs

Data Availability

Over 90% reporting rate

Large no. of indicators

Easily available

Data Use

Weak culture

Not used for decision making

Limited monitoring & feedback

Data Systems

Limited visualizations

Cumbersome forms

Inconsistent quality

Logistics Data

Not used consistently for resupply decisions

Separate system for warehouses and SDPs

Overview of Implementation

VISIBILITY

- Simplified excel based inventory management tools
- Mobile app that collects data during mentor visits
- Tracking key performance indicators

QUALITY

- Strengthening record management and reporting
- Data ownership
- Linkages with commodity availability
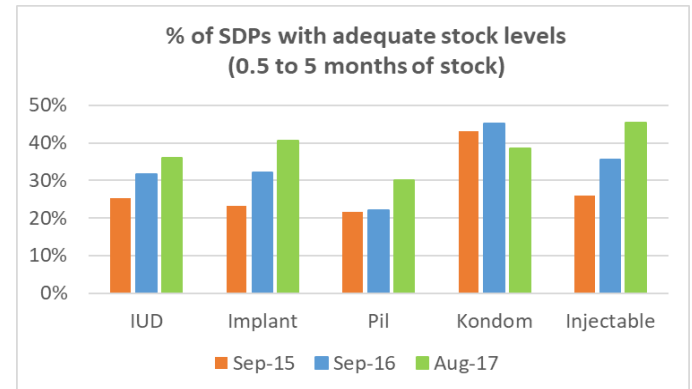
DATA

USE

- Informed resupply
- Standardizing trigger points
- Quality Improvement Teams
- Feedback and recognition

ORGANIZATION

- Equipping stakeholders with SOPs and tools
- Defining roles and responsibilities
- Facilitating multi level/division collaboration
- Routine mentorship and on-the-job training

Outcomes and results

- Reduced stock imbalances and wastage

- Strengthened collaboration and customer service through routine QITs

% of SDPs with adequate stock levels (0.5 to 5 months of stock)

Stock card accuracy
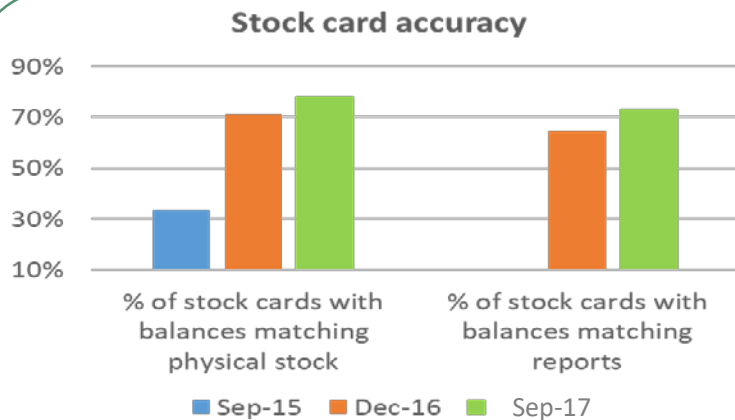
- Improvement in record and report accuracy

- Increased ownership to improve data quality and outcomes

- Routine mentorship and feedback has improved motivation and accountability

- Improved storage practices

Mentor Visits
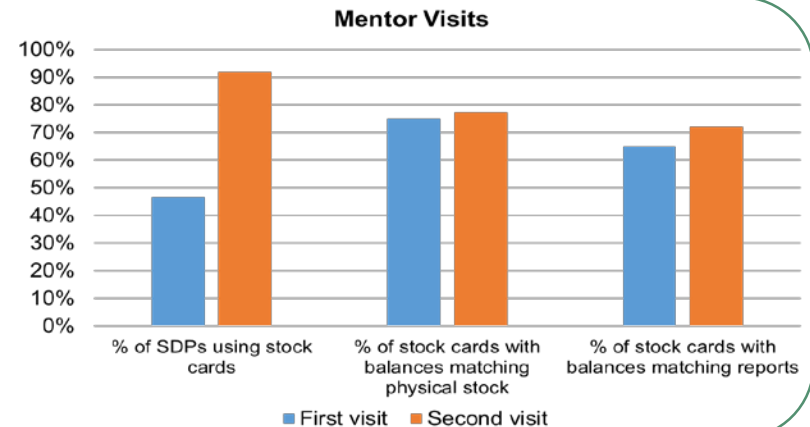
Key considerations

Simplified
- Familiar low cost platforms. Minimal training
- User friendly. Simple indicators

Purposeful
- Comprehensive. User centric
- Facilitates local action. Result oriented

Linkages
- Monitoring and feedback mechanism
- Ownership and motivation

Culture
- Policy. Accountability
- Continuous improvement

Challenges

- Tendency to switch back to old practices
- Trusting data to make decisions
- Managing different levels of capacity
- Breaking silos within the organization structure
- Emphasizing the importance of supply chain management within the FP program

Terima Kasih

Guinea

Dr. Sano Nagnouma, Ministère de la Santé, Unité de Gestion Logistique

# Aperçu de la Mise en Oeuvre du VAN

- Equipes IMPACT au niveau de six districts (2 pilotes + 2) et au niveau central
  - Identification des districts pilotes
  - Identification des membres des équipes
  - Formation des membres des équipes, y compris la conception des procédures des équipes
    - Sélection des indicateurs à suivre/évaluer
    - Calendrier des réunions
    - Ordre du jour standard des réunions
    - Réunion de préparation des réunions
    - Outils
- 5 mois pour mettre en œuvre ces activités

Considérations clés

- Nouveau système d'information pour la gestion logistique en place depuis début 2017
- Nouveau système de traitement des données informatisé en cours de mise en œuvre
- Existence d'autres comités de gestion existants, mais pas focalisés sur la gestion des produits
- Soutien technique et financier des partenaires
- L'Unité de Gestion Logistique en train d'être mise en place

Résultats

- Meilleure qualité et visibilité des données
- Identification et résolution des problèmes dans la chaîne d'appro aux niveaux local et central
  - Des actions de redéploiement de stock ont été effectuées
- Mise en place des équipes IMPACT dans tous les districts comme élément du plan stratégique pour la chaîne d'approvisionnement

Taux de Rapportage

Taux de Ruptures de Stock (moyennes; 3 produits PF types)
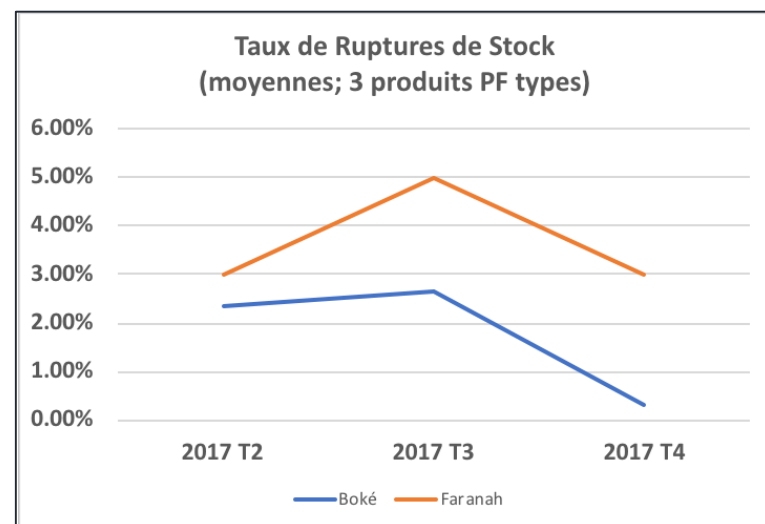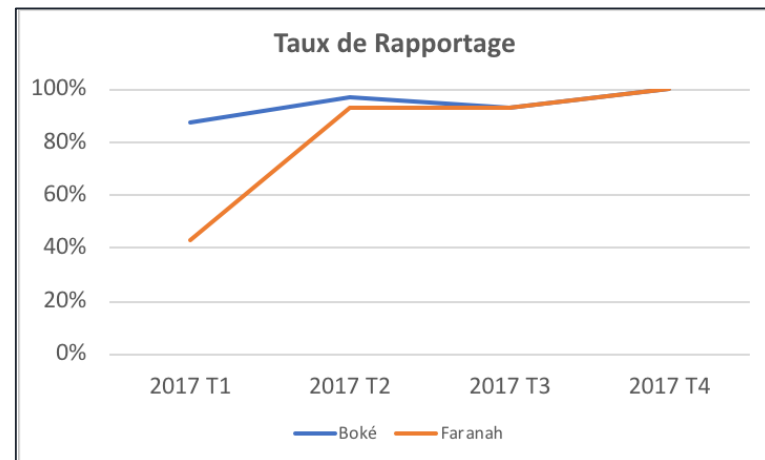
Défis

- Mise en place d'un système de suivi efficace piloté par UGL et impliquant les acteurs du niveau intermédiaire pour garantir la transmission régulière des données logistique de routine

- Equipes IMPACT dans six districts sur 38; impact limité pour le moment

- Mise en place des équipes en même temps que le personnel s'habitue au nouveau système d'information intégré

- Equipe au niveau central; défis pour la tenue régulière des réunions

Merci

Kemsa explores using the IBM Watson Artificial Intelligence (AI) Engine

Dennis Ndwiga, Senior Business Analyst

Kenya Medical Supplies Authority (KEMSA)

What if the Kemsa supply chain used artificial intelligence (AI) to aid in decision making?

- Goal: Could a concept like this work in our community now? Or later?

- Vision: Kemsa will have an AI trusted advisor to share insights on causes of stock-outs, preventative measures and identification of relevant resources to improve availability of product by 50%

- Dec/Jan2018: Successful IBM Watson Supply Chain proof of concept with Kemsa sample supply chain data across 24 facilities
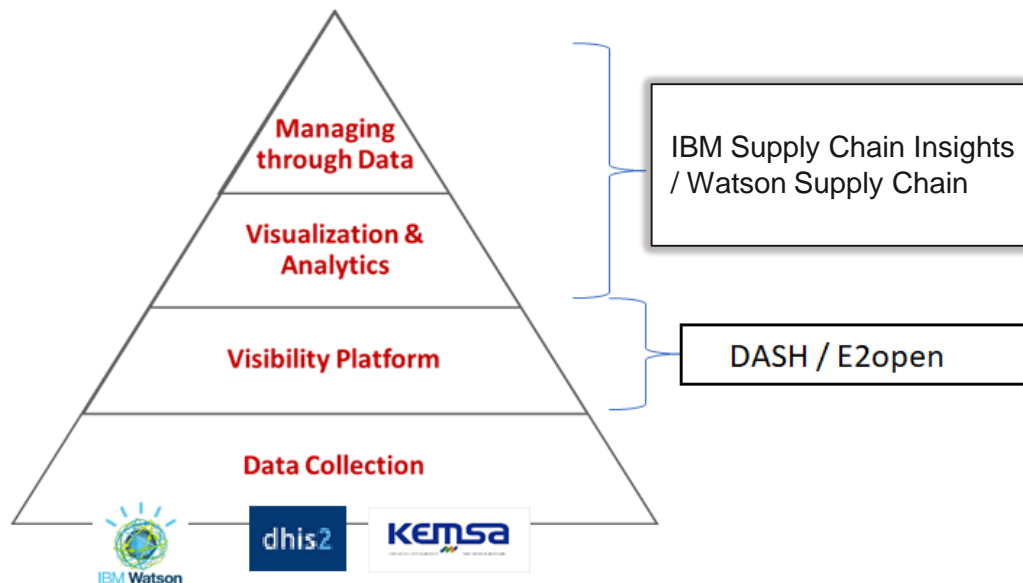
Key Considerations

- Supply Chain Insights provides various user interaction methods
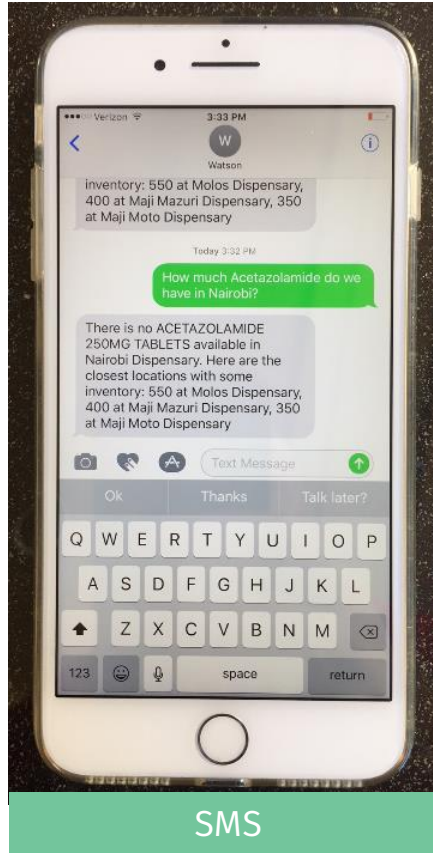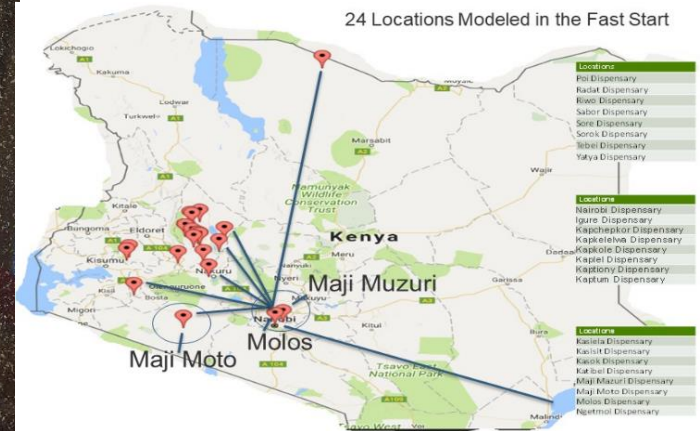- Designing for connectivity and hardware challenges
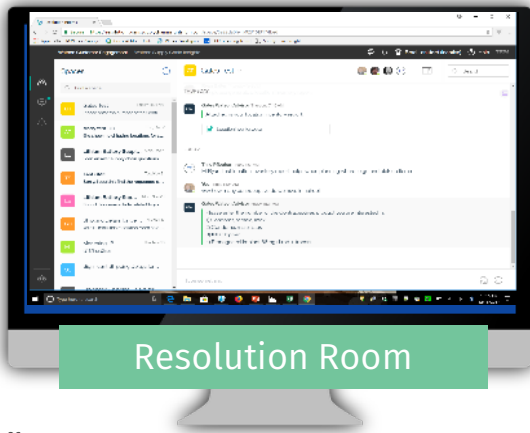
Resolution Room

26

Voice over Mobile Device

SMS

Question: How much Acetazolamide do we have in Nairobi?

Watson Answer: No Inventory for Acetazolamide is found in Nairobi but the nearest locations with inventory are provided in Watson's response

24 Locations Modeled in the Fast Start

Key Outcomes and Results

Todays AI technology allows us to leverage cognitive capabilities to create a transparent, intelligent and predictive supply chain for Kemsa.

The successful proof of concept has resulted in an expanded focus to pilot with real data at a select set of facilities.

Moving forward we expect to be able to:

Analyze both structured and unstructured data for greater insight	Empower people with cognitive knowledge for faster, better actions
Enable comprehensive visibility across the ecosystem with the VAN platform	Enhance existing systems, eLMIS, with cognitive understanding and learning

Lack of visibility and transparency is the greatest hurdle in achieving the supply chain organization's objectives.
– IBM IBV Global Chief Supply Chain Officer (CSCO) Study of 400 supply chain leaders

Challenges Encountered

In the near term, Watson will require:

- Connecting Kemsa supply chain data to Watson using a VAN platform to collect and aggregate at a small number of facilities

- Training the cognitive engine

- A successful pilot using real data

- A sustainable business model

At scale, Watson will require:

- Using all possible data collection methods to obtain last mile data

- Connecting Kemsa supply chain data to Watson using a VAN platform to collect and aggregate data from many sources of data across the 47 counties and ~6000 facilities (for a full roll out)

- Training and maintaining the cognitive engine over time so that it continually generates the best responses to users questions