SMS Resupply System - the last mile

Lessons learnt in Cote d’Ivoire

Ilse Van Roy - MSD

With special thanks to MOH Cote d’Ivoire and Dr SYLLA Saran for the ongoing support
We believe we have a responsibility to help increase access to medicines, vaccines and quality healthcare worldwide by discovering smart, sustainable ways to expand global access to healthcare.
How it all started....

Brain storm session by the innovation team of MSD EEMEA (East Europe Middle East Africa) region

Exploring Technology to “Be Well”

How we can contribute to Merck Mission?
How it all started....

**Fundamental question:** what are we trying to solve? Can we leverage technology/innovation? How can we do this in a way that supports countries and advances women’s reproductive choice and empowerment?

Innovation can be simple, using existing low level technology and come at relatively low cost

Several ideas and projects were considered

Choice made for SMS project to improve last mile supply in Cote d’Ivoire
SMS technology, tried and tested solution

**Africa's mobile economic revolution**

Half of Africa’s one billion population has a mobile phone – and not just for talking. The power of telephony is forging a new enterprise culture, from banking to agriculture to healthcare.

Numerous examples of use of SMS in the health sector & to support supply chain mechanisms

e.g. Novartis led initiative ‘SMS for life’: a public-private collaboration to prevent stock-outs of life-saving malaria drugs in Africa
MSD imperatives

Full adherence to company compliance policy, local legislation and pharmaceutical codes

Develop, test and hand over solution

The program should be sustainable and owned by the MOH in Cote d’Ivoire

Low cost technology, easy maintenance, ensuring local people can be administrators and avoid any future need for external ‘consultants’

Developed for and adapted to the country’s needs, in order to support and improve medical benefit for patients
Current Situation

Health Center

District Warehouse

Each month HCP makes a list of medicines needed and takes order to district warehouse. Some weeks later, the health center employee returns to the district warehouse to pick up the goods, hoping all will be available.

= demonstrable inefficiencies and thus opportunities to better meet patient and public health needs
Key bottlenecks:

Limited to no structured communication between health centers and corresponding district store
Lack of immediate feedback mechanism on potential out of stock situations at district level
Inadequate data collection on historical demand and supply of contraceptive commodities at health center level
No or inaccurate key performance indicators to guide strategic decisions at the national level
Thus, poor product inventory management, which leads to shortages and has direct public health implications

*How do we leverage technology to remove bottlenecks for better system efficiencies and meet public health objectives in a cost-effective manner?*
Proposed Approach

District Store

Health Center

#RHSUPPLIES2016
Solution Dashboard

Web Portal

Map Report

Dashboard Analytics

#RHSUPPLIES2016
Development of the technical solution, 3-way workflow
Pilot Districts

Districts of Toumodi and Dabakala have been selected to be part of the pilot SRS deployment.

- District of Toumodi with 15 health centers supplied by 7 districts warehouses
- District of Dabakala with 13 health centers supplied by 2 district warehouses
## Pilot: List of Products included

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<th>CODE</th>
<th>Maternal Health Products</th>
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<tr>
<td>AS17030</td>
<td>OCYTOCINE AMP INJ UNITE 5ml AMP</td>
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<tr>
<td>AS21020</td>
<td>MAGNESIUM SULFATE 500MG/ML INJ AMP</td>
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<td>AS21025</td>
<td>GLUCONATE DE CALCIUM 100MG/ML AMP /10ML</td>
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<table>
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<tr>
<th>CODE</th>
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<td>AS27000</td>
<td>MICROGYNON 0,03/0,15MG CYCLE</td>
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<td>AS27132</td>
<td>MICROLUT 0,03 MG CYCLE</td>
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<tr>
<td>AS27133</td>
<td>DEPO PROVERA/PETOGEN 150MG/3ML AMP INJ UNITE</td>
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<td>AS27134</td>
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<td>JADELLE (IMPLANT+TROCARD) 150µg</td>
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<td>LEVONORGESTREL 1,5 MG COMP (NORLEVO)</td>
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<tr>
<td>AS65789</td>
<td>SAYANA PRESS 104mg/0,65 ml AMP UNIJECT</td>
</tr>
</tbody>
</table>
Engaged ARTCI to issue toll free number

Complete Web App & Testing with EU Provider

Training Local System Admin via Skype

System Test in CI

Orange to share Integration Guidelines (tech)

Pilot System Deployment

System Assessment/Enhancement

Full Scale Deployment, with different products (no preference to MSD products)

Orange Shared SMS - Pricing

Start: Visit to Cote d'Ivoire
1. Meet MoH, UNFPA & Orange
2. Facts Finding trip
3. Requirements Gathering

System Design & Development

Complete Web App & SMS Integration

Engage Orange CI for Web-SMS Integration

2015
Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec

2016
Jan | Feb

2017
Jan | Feb
From pilot to nationwide roll-out, key success factors........