VPPAG Bar Code Subgroup – An Update

Barcoding for Efficient Handling in the Vaccine Supply Chain

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What Is WHO / VPPAG?

- **Vaccine Presentation and Packaging Advisor Group**
  - Forum for public sector and vaccine manufacturers
  - Discuss and reach consensus on vaccine presentation and packaging issues
  - Support the development of products suited to low and middle income country contexts.
  - VPPAG is a standing committee for Immunization Practices Advisory Committee (IPAC)

- **Bar Code Subgroup (Working Group)**
  - Established in 2011
  - Reporting back to the full group.
  - Members include: IFPMA\(^1\), DCVMN\(^2\), UNICEF Supply Div, GAVI, PATH, CDC and GS1

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\(^1\)International Federation of Pharmaceutical Manufacturers and Associations

\(^2\)Developing Country Vaccine Manufacturer’s Network
Objective & Driving Force of the WG

OBJECTIVE
• Provide input on bar coding by
  – Adopting a standard
  – Recommending data elements for
    – Primary
    – Secondary
    – Tertiary

DRIVING FORCE
• Improve Stock Management at the country level through bar coding
  – Increase visibility by using AIDC techniques through bar code implementation
  – Reduce stock out
Starting the Momentum

- Level Set
- Vision
- Challenges
• Proposed Pilot – Tanzania
  • Determination of vaccines to be used for a study
    – UNICEF
    – Tanzania Gov.

• Existing GAVI programs would fund vaccines in Tanzania

• Collaboration with manufactures
  – Introduction of the barcodes needed for the supply chain
    – Initial at tertiary and secondary packaging
    – Addition of a SSCC at the insulated shipping box and or pallet
Information Gathering

- Questions still remained
  - Bar code standard
  - Data set to include
  - Time horizon
GS1 standard: 100% of manufacturers say that GS1 is the most appropriate standard to adopt

100 % Agree
Do you currently include bar codes on any levels of packaging for vaccines, in any markets?

![Bar code Preferences Graph]

Current Use  Bar code Preferences  Timeline

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What information should be encoded onto a bar code for secondary packaging?

- GTIN Only: 2
- GTIN+Lot Number+ Expiry Date+Serial Number: 2
- GTIN + Lot Number + Expiry Date: 11
What information should be encoded onto a bar code for Case (when used as a trade item)/Shipper?

- **GTIN Only**: 13
- **SSCC (for mixed SKU cases)**: 1
- **GTIN + Lot Number + Expiry Date**: 1
What information should be encoded onto a barcode for Case/Shipper or Pallet as logistics units?

- GTIN + Lot Number + Expiry Date: 3
- Investigation underway: 1
- Unclear: 1
- SSCC Only: 7
- GTIN Only: 1
- GTIN + Lot Number + Expiry Date + SSCC: 2

Current Use
Bar code Preferences
Timeline
WHO, UNICEF and GAVI are considering requiring bar codes on all secondary packaging and case-shippers, and an SSCC on pallets, by the end of 2014. Is this timeline feasible?

Most manufacturers that responded “no” have provided estimated feasible timelines within 2015

Percentage of vaccines purchased from suppliers by UNICEF SD on behalf of GAVI in 2012 that responded “yes” (dependent on time of announcement)
From a manufacturer’s perspective, what do you feel is a realistic timeline for including bar codes (GTIN + lot number + expiry) on all primary containers for low and middle income country use?

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years or more
- Unknown

Pie chart showing the distribution of responses, with 2 years being the most common timeline.
Recommendation

#1 **Recommends** the use of GS1 standards for bar codes used on vaccines and diluents prequalified by and purchased through UN agencies

#2 **Recommends** the inclusion of
   GTIN + Lot number + Expiry date\(^1\)
on bar codes located on secondary and tertiary packaging for vaccines and diluents prequalified by and purchased through UN agencies

#3 **Prefers** the use of the SSCC on case/shipper or pallet packaging for vaccines prequalified by and purchased through UN agencies

\(^1\) In keeping with the GS1 flexibility, the order of variable and non-variable fields are not specified.
Thank You

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