

Market Information for Access



Where to find information on vaccine product, price, procurement & markets

Learning Network of Countries in Transition from Gavi – Webinar May 31st 2018

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WHO's engagement

What are we solving for?



Target 3.8: Access to Essential Medicines for All



SUSTAINABLE DEVELOPMENT GOALS

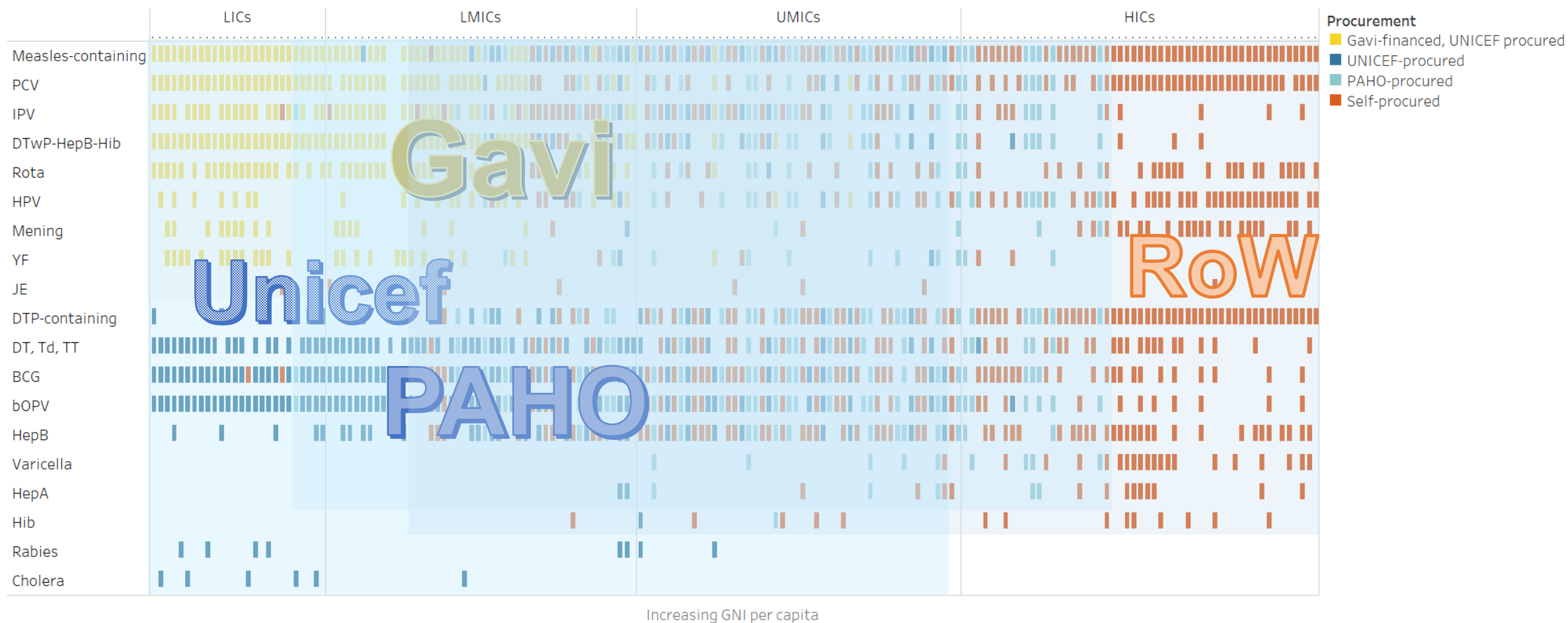


SDG 3 – Target 3.8

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.




Market Information for Access: the missing segment



Source: Developed by WHO with WHO V3P, UNICEF SD, PAHO RF, Gavi Secretariat, GVM

The WHA has repeatedly called for action on access to vaccine supply



- ❖ Total of 50 WHA Global Resolutions on access to medicines and vaccines + 45 regional Resolutions. E.g. 

- ❖ Resolution 68.6 – WHA – May 2015
- ❖ Resolution 69.25 – WHA – May 2016

- ❖ Call for action also from GVAP (objective 5), SAGE (e.g. April 2015)
- ❖ May 2018: Mandate to develop **Access Roadmap 2019-2023**



Supply, demand and information factors influence access to vaccine supply

SUPPLY FACTORS

1

Factors limiting availability

Production issues

Limited supplier base & production capacity

3

INCOMPLETE INFORMATION

Limited communication between supply & demand



Demand intelligence

Supply intelligence



2

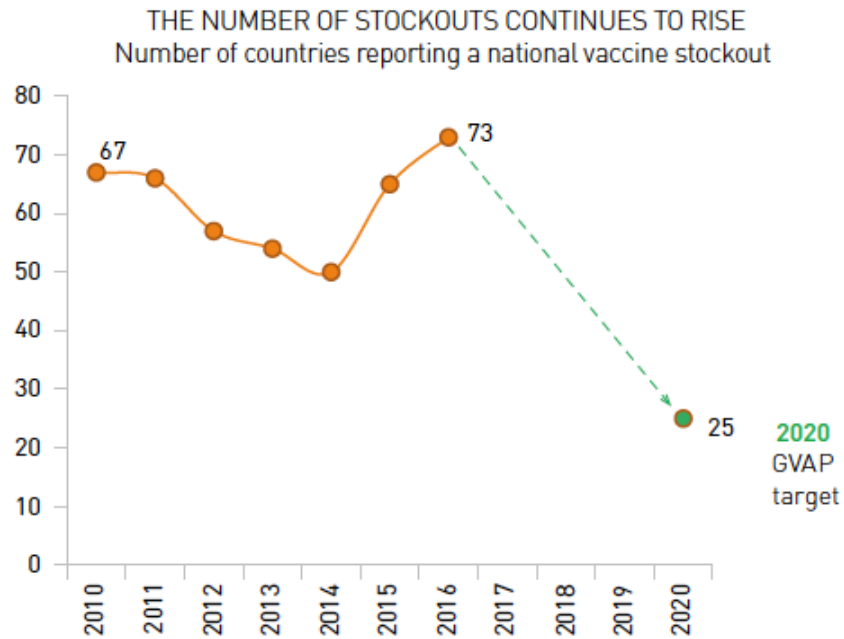
DEMAND FACTORS

Factors limiting access

Inflexible demand

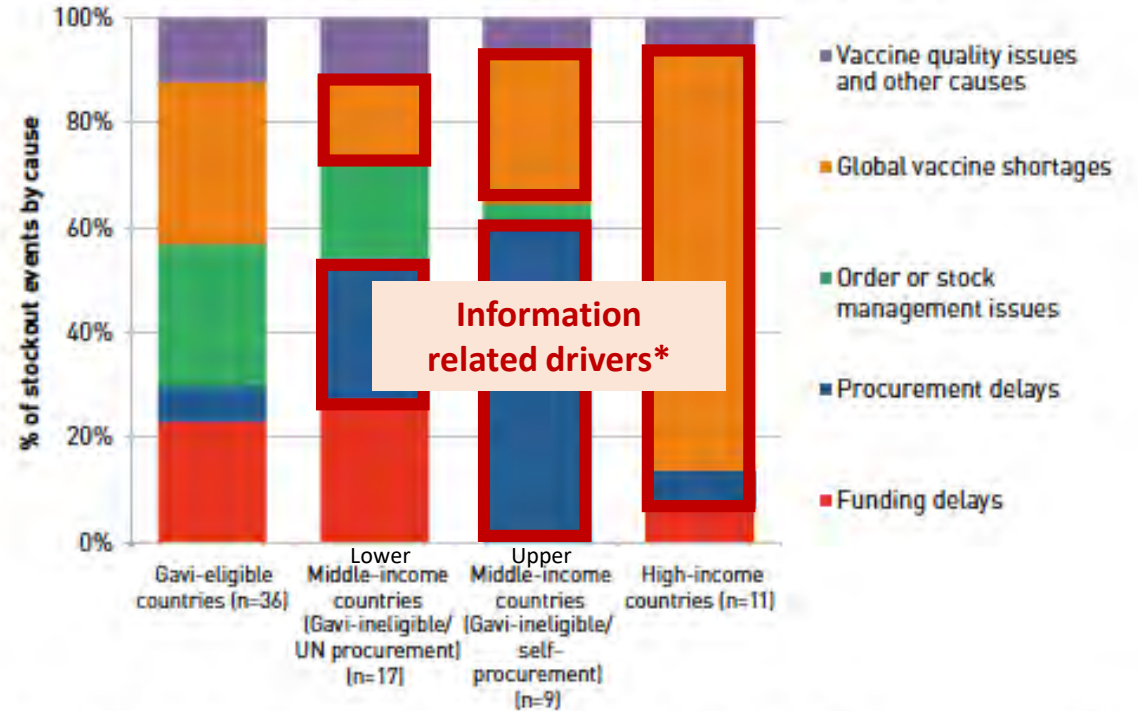
Unpredictable or unknown demand

An important share of national stock-outs has information-related drivers account for



The number of countries reporting a national stockout rose again in 2016, continuing a recent trend of increasing disruptions in vaccine supply. Some 73 countries reported 131 national-level stockout events for at least one vaccine for an average duration of 51 days in 2016. These 73 countries account for 38% of WHO Member States and represent 34% of the world's birth cohort. The vaccine supplies most commonly affected were of DTP-containing vaccines and poliovirus vaccines.

THE CAUSES OF NATIONAL VACCINE STOCKOUTS VARY

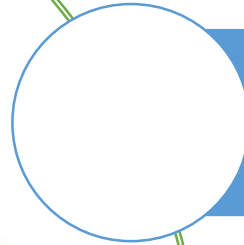


Countries of all income levels were affected by stockouts, although the causes tended to vary. Stockouts in high-income countries were generally caused by vaccine shortages but in other countries were often linked to factors such as inaccurate forecasting and delays in procurement.

MI4A to inform global and local access strategies



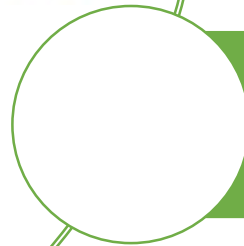
MARKET INFORMATION FOR
ACCESS TO **VACCINES**



Enhance the **understanding** of global vaccine demand, supply and pricing dynamics and identify affordability and shortage risks



Convene global health partners to define strategies and guidance to address identified risks



Strengthen national and regional **capacity** for improved access to vaccines supply

MI4A builds on the success of the V3P project and on 2017 successful BCG and D&T pilots

Market Information for Vaccine Access initiative

1.A Collection & quality control of **price/procurement/demand/supply data**
i.e. GVMM, V3P

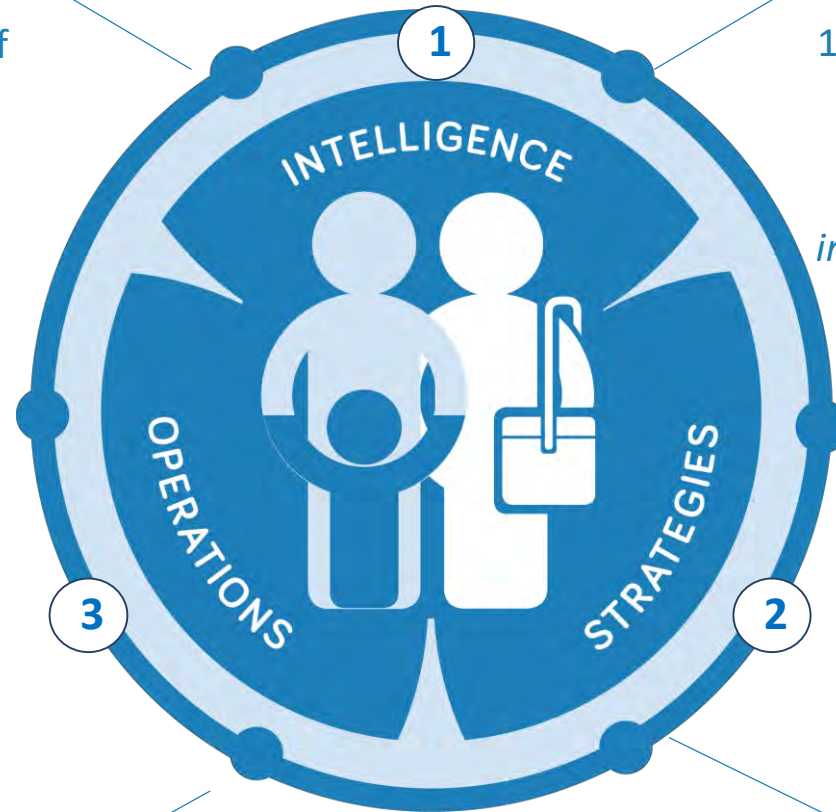
1.B **In depth global market analysis** for vaccines at risk (affordability/shortages)
e.g. Relationship between price & income; D&T global market analysis

3.B Providing **technical assistance** to countries to access supply

2.A **Information sharing ecosystem** *i.e. convening of industry, global health partners, countries*

3.A Developing **guidelines/tools**

2.B **Guidance & strategies** to enhance affordability and availability *i.e. Humanitarian Mechanism (PCV); WHO-UNICEF Joint Statement on TT to Td switch*



Intelligence

What information is
available?

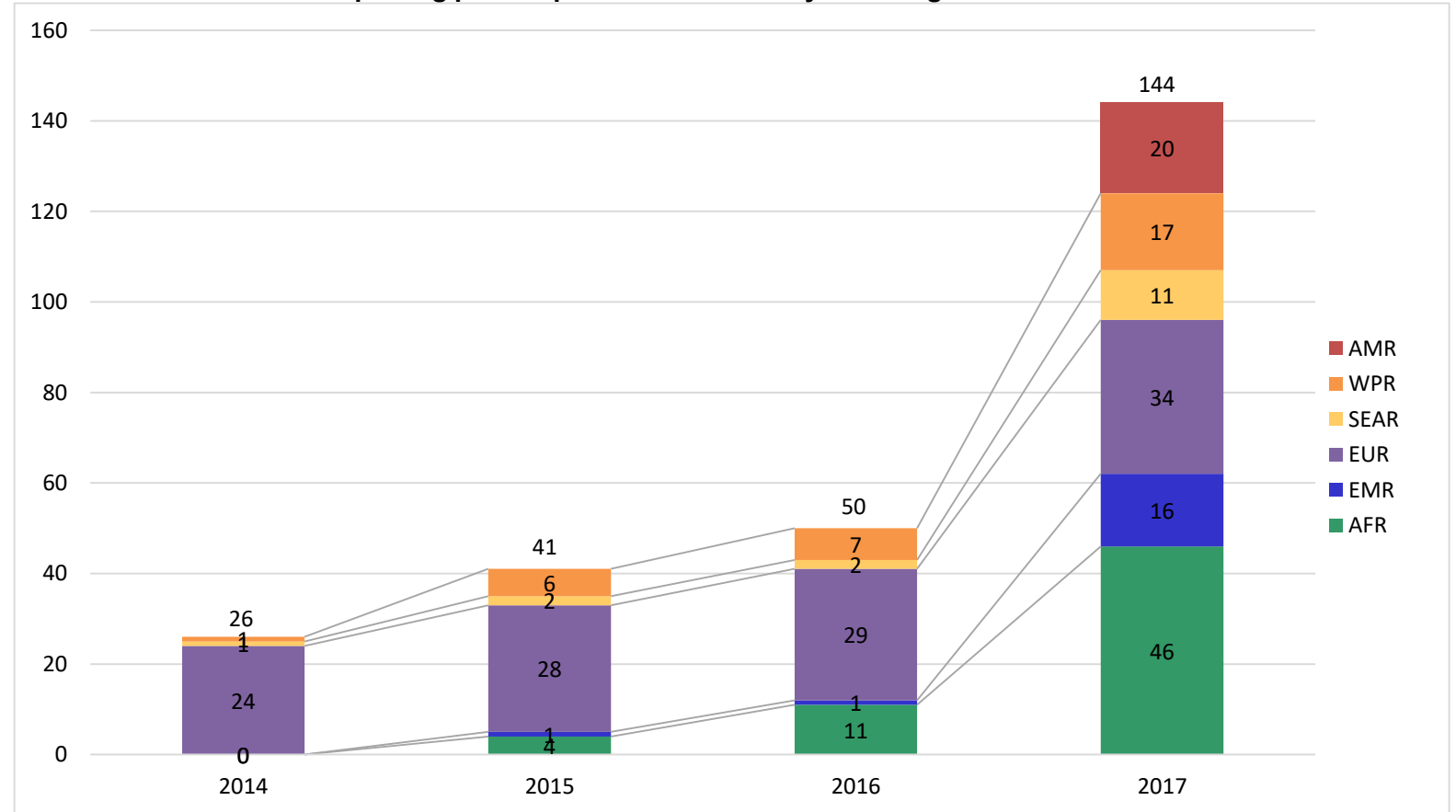


Great advances in vaccine market intelligence

- ❖ **144 countries have collaborated with WHO to share information** (90% of non-Gavi MICs; 84% of world)
- ❖ **Countries share info on vaccines, products, suppliers, prices, volumes, procurement & payment method, contract duration, incoterms**
- ❖ We are now enlarging this knowledge hub with additional partner/industry sources of information (MI4A)



Number of countries reporting price & procurement data by WHO region over time



Source: WHO V3P. Note: The graph represents all countries that have directly shared price data with V3P, regardless of the quality of the data.

Where can you access information?



A dedicated website is available for you:*

www.who.int/immunization/MI4

- ❖ **Vaccine purchase database:** all country reported data on vaccine purchase, including source, price, terms and conditions
- ❖ **Knowledge repository:** all available analysis and fact sheet developed with country data
- ❖ **Resource gateway:** links to other websites with relevant information (e.g. UNICEF, PAHO RF)



V3P: Country Fact Sheet
LMIC 282

V3P: Region Fact Sheet
AFR

V3P: Global Fact Sheet
GLOBAL

GLOBAL MARKET UPDATE BCG VACCINE

GLOBAL MARKET STUDY DIPHThERIA & TETANUS CONTAINING VACCINES

Price Database

Information Repository

Resource Gateway

* This link also works: www.who.int/immunization/v3p

Using information

How does information help countries?



What is the information gap and how can we close it?

1

NEED

Countries lack visibility into vaccine markets for decision making

ENABLER

Identifying price ranges and supplier, product, procurement options

BENEFIT

Informed planning & procurement leading to sustainable demand

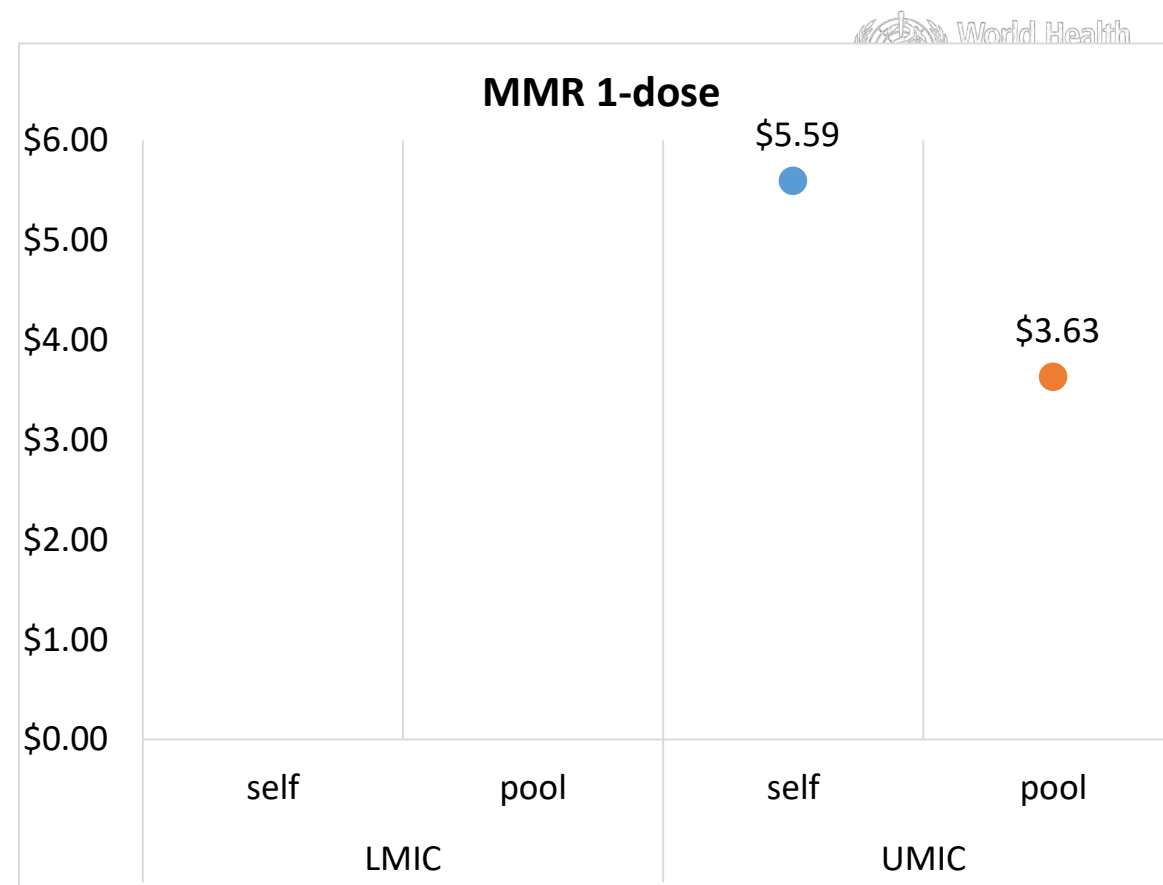
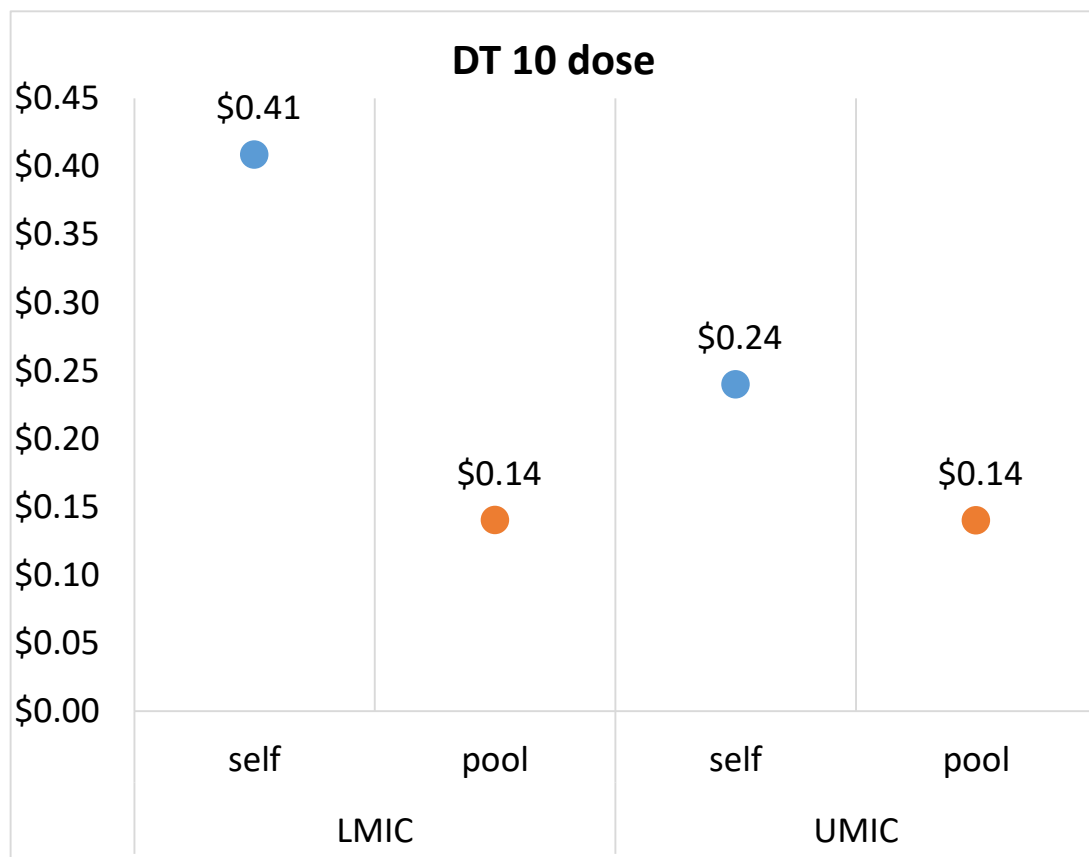


W
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Countries can use information to compare procurement methods

For the 2016 V3P data set, pool-procurement resulted in lower WAP than self-procurement for 77 to 91% of vaccines, depending on income group




Countries can use information to understand pricing prospects: e.g. Gavi transitioning countries

As of August 2017, six manufacturers have committed to continue providing countries that transition out of Gavi support with access to the same prices accessed by Gavi-supported countries for a period of 5 years or more.

	Period		PCV (2017)			Rota (2017-2021)			
	1 st year accelerated transition / self-financing		Intro with Gavi ^a	GSK 2-dose vial ^b	Pfizer 1-dose vial	Pfizer 4-dose vial	Intro with Gavi ^a	GSK 1-dose presentation ^b (2-dose course)	Merck 1-dose tube (3-dose course)
Angola	2011	2018	✓	NE	\$3.30	\$3.05	✓	€1.88	NE
Congo	2011	2018	✓	NE	\$3.30	\$3.05	✓	€1.88	\$3.20
Nigeria	2017	2022	✓	\$3.05	\$3.30	\$3.05	X ^e	€1.88	\$3.20

Source: WHO IVB


Vaccine Pricing: Gavi Transitioning Countries

All prices shown in this document are Unicef awarded price per dose (in USD), per product, per supplier, per calendar year, based on multi-year supply agreements. They do not represent contractual obligations between sellers and Gavi-transitioning countries and as such are not a guarantee of price. They are provided solely for the purpose of helping Gavi transitioning countries to plan and budget adequately for self-financing.

Highlights
Starting January 2018, nine countries will be in a state of accelerated transition from Gavi support to self-financing^a, and 17 countries will have transitioned out of Gavi support^c.
Six manufacturers have committed to continue providing countries that transition out of Gavi support with access to the same prices accessed by Gavi-supported countries, or to maintain the prices that these countries are currently paying for certain vaccines, for a period of five years or more. These prices are only available to countries procuring through UN agencies. These commitments apply to:


- DTP-HepB-Hib (pentavalent)
- pneumococcal conjugate (PCV)
- rotavirus (Rota)
- human papillomavirus (HPV)

Table 4 shows how the UNICEF multi-year supply agreement price would apply to each of the 26 Gavi-transitioning, or fully self-financing countries, based on the supplier commitments. For these countries, please note:

- One country is currently not eligible for the price commitments to PCV, because they do not meet the Advanced Market Commitment (AMC) condition of DTP3 coverage of ≥ 70%.
- Six countries that had not introduced rotavirus vaccine with Gavi support are not currently covered by any price commitment for rotavirus vaccine;
- Eight countries that had not introduced HPV vaccine with Gavi support are susceptible to not being covered by any price commitment if an agreement for introduction has not been made by end of 2017;
- Countries that do not procure through UNICEF are ineligible for Pfizer's price commitments to PCV, and countries that do not procure through UNICEF or PAHO are ineligible for GSK and Merck's price commitments to Rota and HPV vaccines.

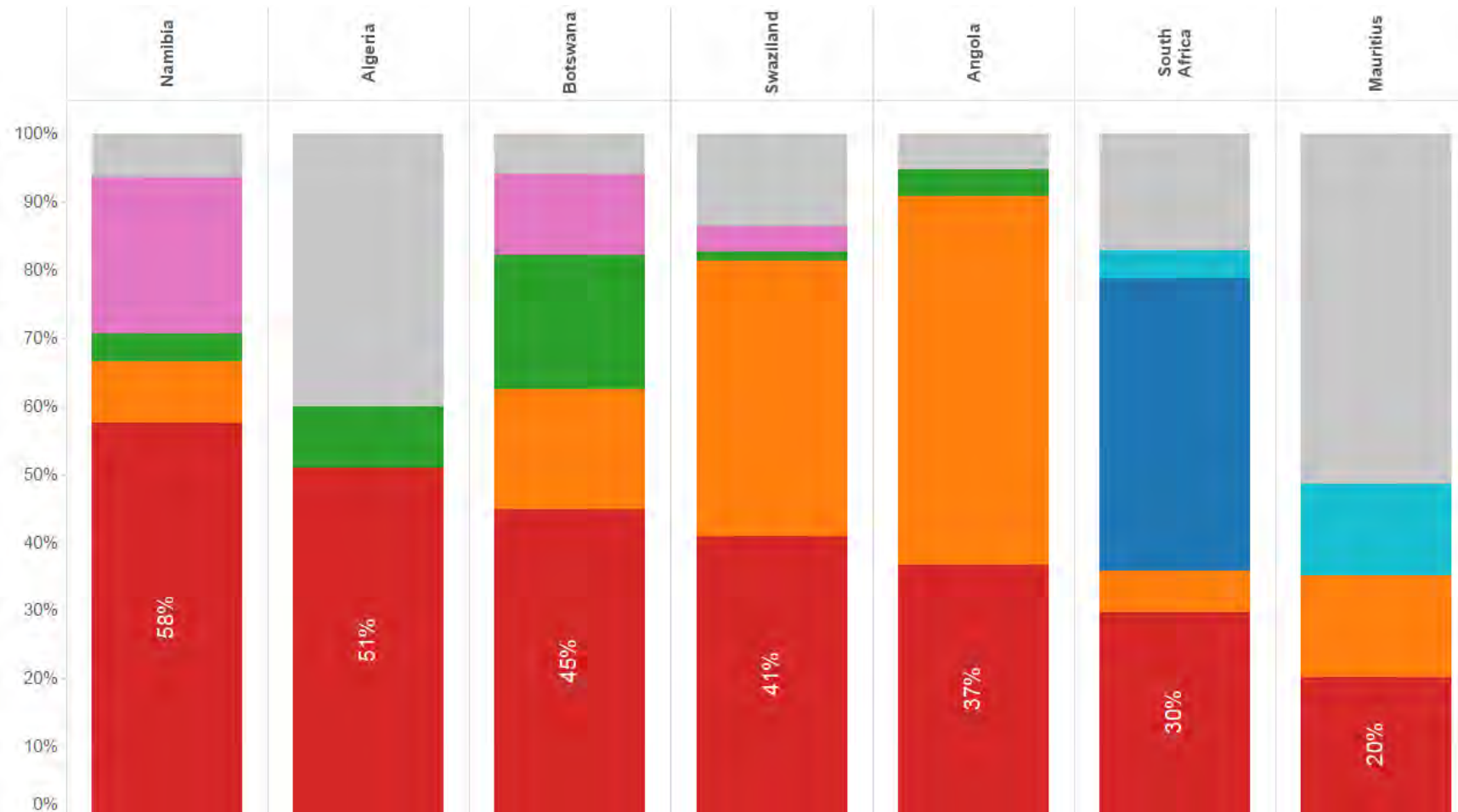
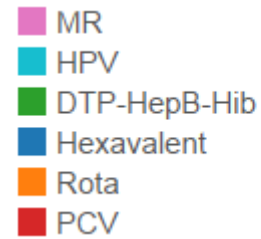
This document is one of several tools available to Gavi-transitioning countries on the VSP website. The VSP database contains vaccine price and procurement information from 144 countries in 2017, as well as information from PAHO and UNICEF. The database, as well as documents on vaccine pricing, are available on the VSP website: <http://www.who.int/immunization/vsp>.
Information for Gavi-transitioning countries is also available on the Gavi website: <http://www.gavi.org/support/accelv/trackinfrastructure/>.
This document has been prepared by the Expanded Programme on Immunization (EPI) of the Department of Immunization, Vaccines and Biologicals. It is a working document. This version of the fact sheet is up to date as of November 2017.
For more information on this document or on vaccine price and procurement, please email VSP_project@who.int.

India, Lao PDR, Nicaragua, Nigeria, Papua New Guinea, Sao Tome and Principe, Solomon Islands, Uzbekistan, Vietnam
Nepal, Armenia, Azerbaijan, Bhutan, Bolivia, Congo, Cuba, Georgia, Guyana, Honduras, Indonesia, Kiribati, Maldives, Mongolia, Sri Lanka, Timor-Leste, Ukraine

 **World Health Organization**

WORKING DOCUMENT - December 2017 | 1

Countries can use information for financial planning & budgeting processes



- ❖ Current analysis shows that for non Gavi-MICs introduction of certain vaccines can have a major budget impact (e.g. on average PCV is 34% of budget)
- ❖ PCV can represent as much as 58% of budget in African non Gavi MICs

Note: Each bar represents a country, country alias are used rather than country names. Only include records with volumes >10. Only includes countries that have reported a price for PCV. Calculated as : [Price per dose of a vaccine] x [Volume of same vaccine]/[sum of [price per dose]x[Volume] for all vaccines]. Used as a proxy for spending on vaccine purchases. Source: V3P data (extracted 18 July 2017). Immunization Vaccines and Biologicals, (IVB), World Health Organization.

What is the information gap and how can we close it?

2

Missing global view of vaccine market preventing risk management

Complement existing information on vaccine markets from Gavi, UNICEF and PAHO RF

Informed risk identification & target actions to manage vaccine shortages



WHO to identify access barriers and communicate with stakeholders

Country Concern	Barriers Identified	MI4A proposed actions
	<ul style="list-style-type: none"> Insufficient number of quality products registered locally (e.g. BCG and D&TCV) 	<ul style="list-style-type: none"> Work with companies and countries to support registration of quality products (e.g. registration fund; collaborative procedure for PQed products)
<ul style="list-style-type: none"> Insufficient supply Long lead times No visibility availability Little flexibility to change products 	<ul style="list-style-type: none"> Over- purchasing due to in country product management issues (e.g. BCG) Frequent production failure No information on supply availability at time of product choice 	<ul style="list-style-type: none"> Work with countries to enhance supply management at country level (BCG) Investigate strengthening the production processes of a few key manufacturers - BCG Improve communication of recommendation for wP versus aP containing D&T combinations with information on tight supply availability

GLOBAL MARKET STUDY DIPHtheria & Tetanus Containing Vaccines

Key Takeaways:

- WHO recommends six doses of Diphtheria and Tetanus containing vaccine and for all countries to replace use of TT with D.
- 100/194 countries do not meet these recommendations, but due to resource constraints, they are now likely to implement WHO recommendations.
- Implementation of the recommendations would increase global demand for all D&T containing vaccines by ~20%.
- Sufficient supply is available to cover both current and future demand for wP (wP) containing vaccines; 1d as the only exception, but in 10-15 year time.
- Supply of aP-containing vaccines is currently sufficient to support demand but any significant change (+10% or more) will require advance warning (up to 18 months) for production adjustment.
- Several countries with only one local registered product are at risk of supply demand being

QUICK STATS:

NUMBER OF VACCINE TYPES: 16

TOTAL NUMBER OF SUPPLIERS: 40 (25 producers, 5 distributors)

2017 ESTIMATED MAINTAINING GLOBAL SUPPLY: ~2 billion doses

2017 ESTIMATED GLOBAL DEMAND: ~1 billion doses

2016 REPORTED PRICE RANGE: US \$0.56-\$45.00

GLOBAL MARKET UPDATE BCG VACCINE

Key Takeaways:

- For 2017, BCG vaccine supply is estimated to be 1.5 times greater than forecasted demand. This excess supply is increasing given the instability of the manufacturing process and is important progress from the restricted supply situation in recent years.
- However, demand flexibility is limited due to product registration constraints and supply is still concentrated, with a few large suppliers with prequalified products serving most countries. Consequently, shortages may still occur.

QUICK STATS:

NUMBER OF TYPES: 1

TOTAL NUMBER OF SUPPLIERS: 19

2017 ESTIMATED MAINTAINING GLOBAL SUPPLY: ~500M doses

2017 FORECASTED GLOBAL DEMAND: ~350M doses

2015 REPORTED PRICE RANGE: US \$0.04-\$15.08 (Median: \$0.52)

Market Highlights: Over ten years (2005-2015), short-duration stock out of BCG (maximum 1.5 months) have been reported across all regions, income groups and government methods. The African region, low income countries (LICs) and lower middle income countries (LMICs) were most affected. In 2014 and 2015, average stock out duration increased. Stock outs seem to be caused by several factors: production issues, countries having only one product registered, timely availability of financing (national or external), procurement shortcomings, and inefficient vaccine management.

Global Supply: Between 2013 and 2015, manufacturing issues for most prequalified (PQ) suppliers led to temporary reduced production or suspension of production. Additionally, some non-PQ manufacturers exited the market. Nevertheless, supply increased significantly in 2016, as some of the manufacturers' production issues were resolved and one new supplier, Green Signal, was PQ'd in 2017. Supply is estimated to reach ~500M doses from 19 suppliers. The suppliers can be split into two groups: (1) four suppliers with PQ'd products that can reach 169 countries (84% of WHO member states) that accept UN procurement or have one of the PQ'd products registered and (2) fifteen suppliers with non-PQ'd products that can serve 52 countries where they have product registered. In 2017/2016, three manufacturers are expected to be back online and additional capacity could be made available from one other currently active manufacturer.



BCG VACCINE

What is the information gap and how can we close it?

3

Several countries cannot access sustainable & fair pricing

Completing understanding of global pricing dynamics

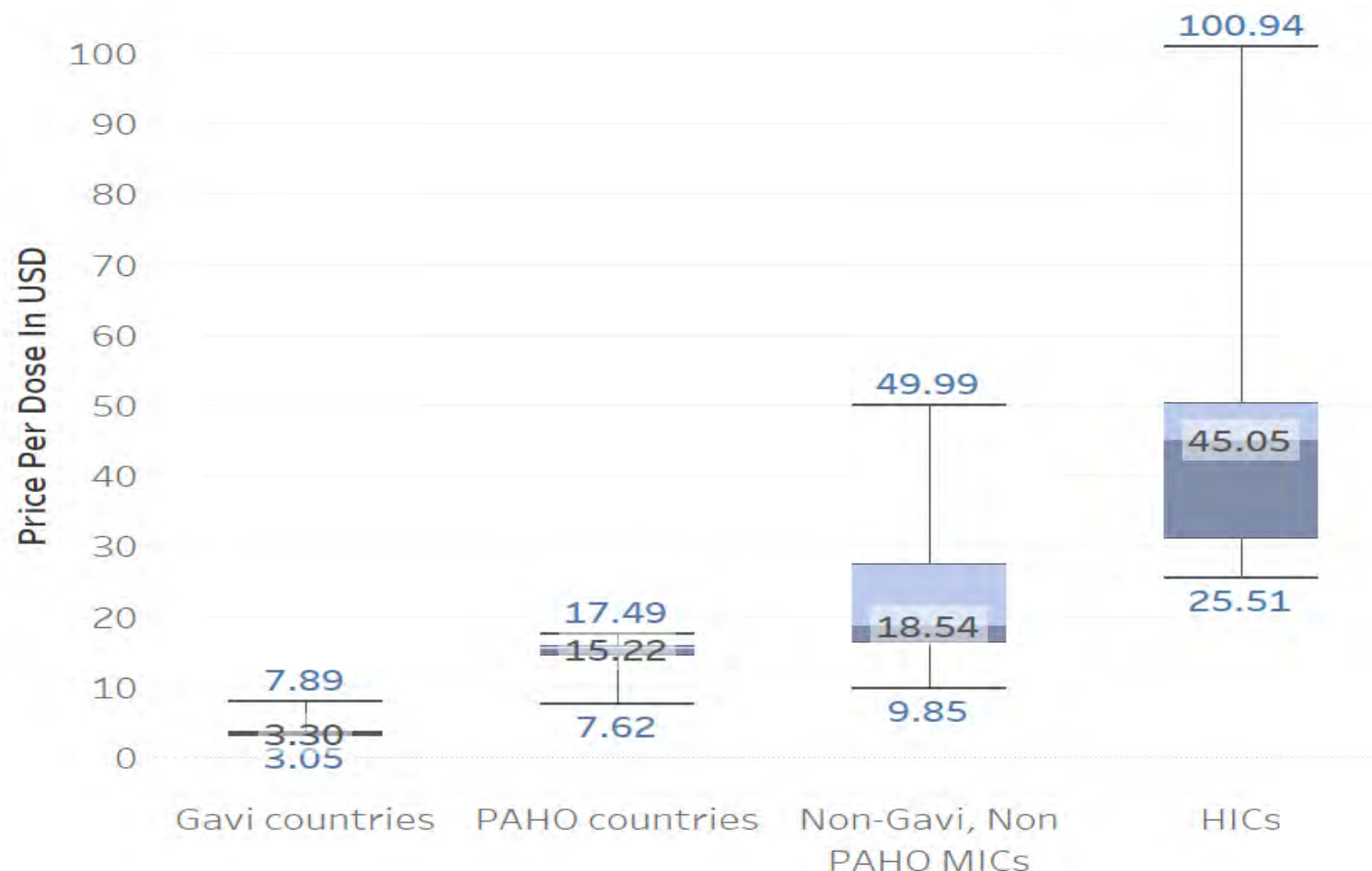
Informed dialogue on fair pricing



Information is used for dialogue on fair pricing

- ❖ There is a clear association between GNI per capita and price level
- ❖ We also observe larger price variation for higher income:
 - non-Gavi MICs, max price = 14x min
 - HICs, max price = 30x min
- ❖ We can improve transparency of pricing strategies and encourage fair pricing to strengthen access

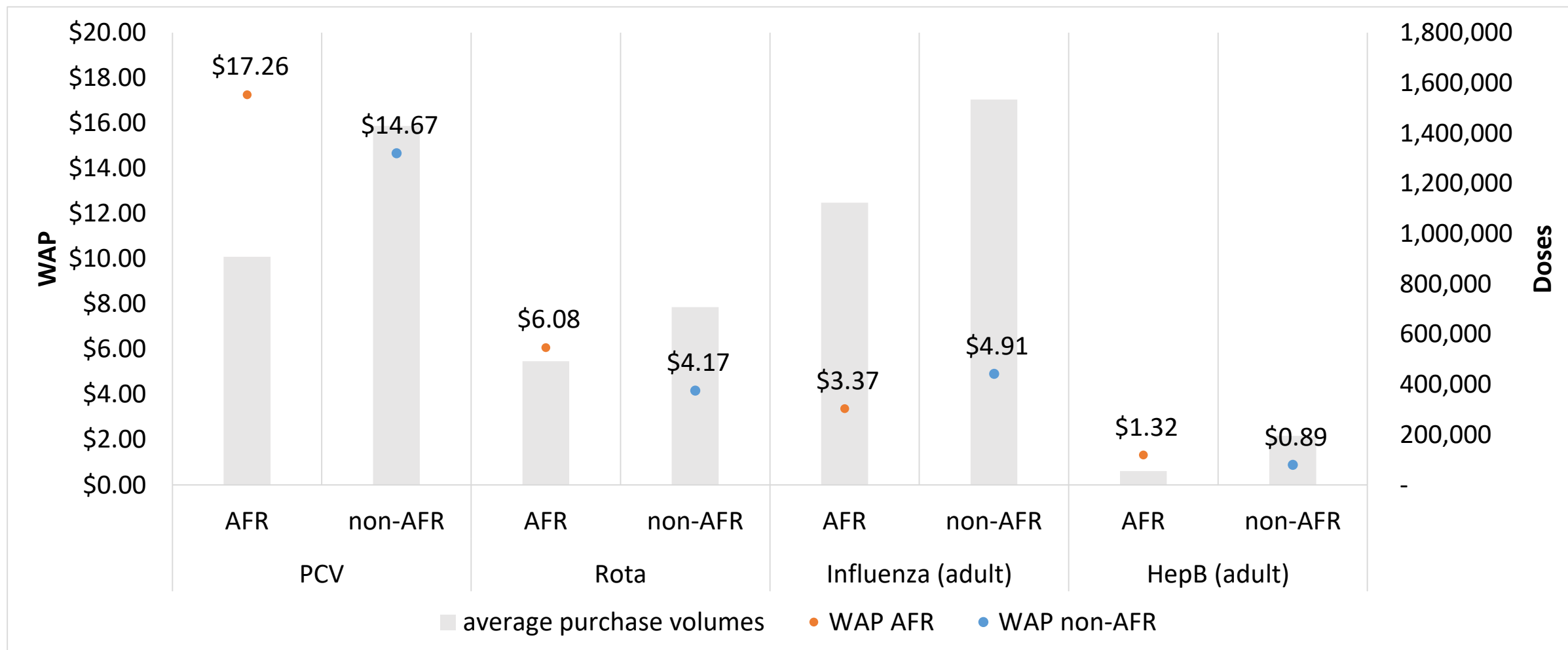
Minimum, maximum and median price by country category for PCV, 2016



Note: The boxes on the graph show the median (centre of the box), a box above and below the median for the nearest quartiles, and a set of “whiskers” that extend to the entire data range.

Region/countries can inform negotiation/tender processes

Non-Gavi MICs in the Afro region pay higher prices for PCV, Rota and Hep B than other self-procuring MICs



Influencing Market Dynamics

**How do we encourage market
shaping for self-procuring &
self-funding countries?**



Fair Pricing Forum



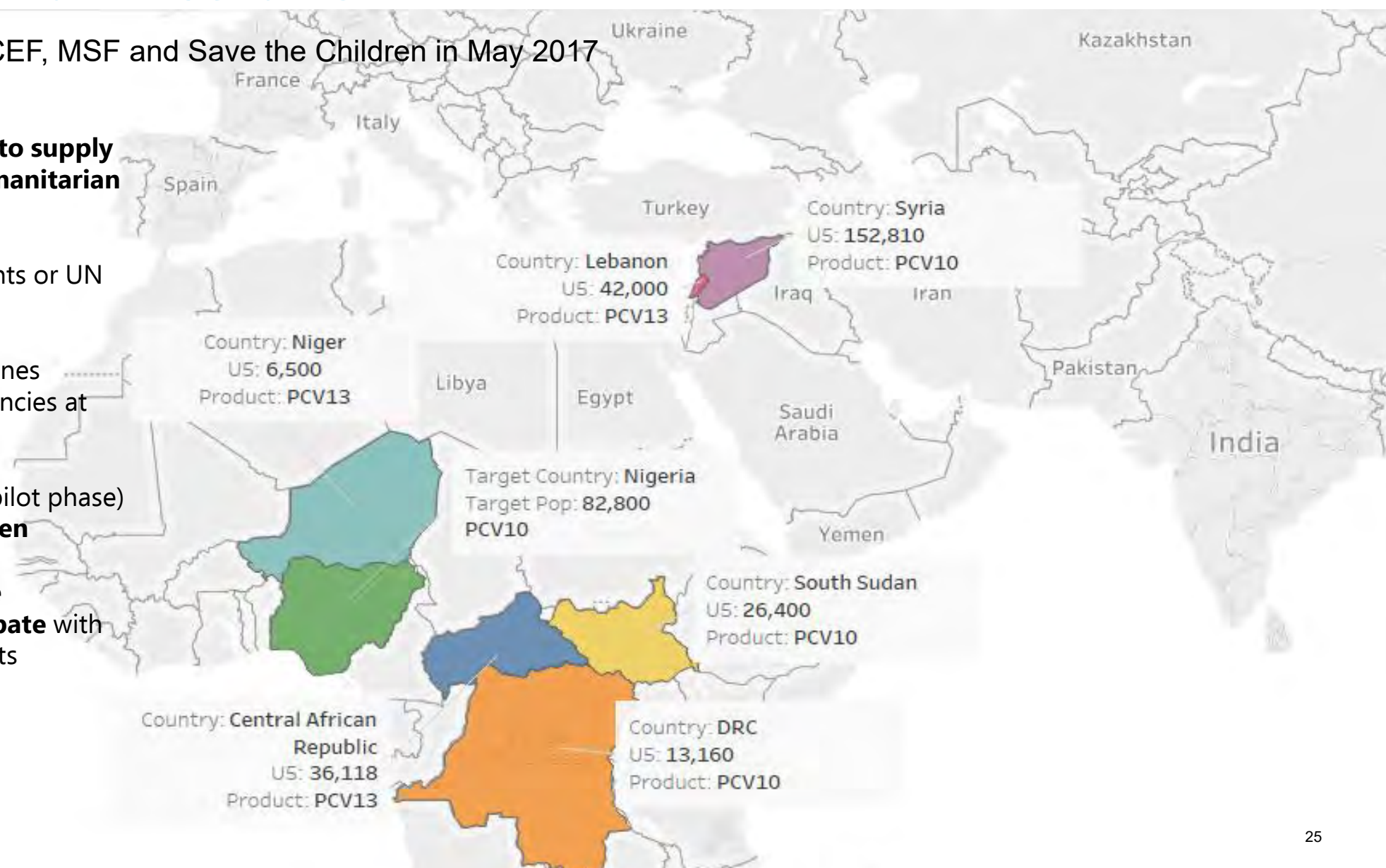
Source: WHO EMP

- ❖ A global dialogue **to explore strategies for establishing fair prices that is sustainable** for health systems and for innovation  World Health Organization
- ❖ Participants: 250 participants from Member states, IGOs, NGOs, academia and industry
- ❖ Organized jointly by WHO and the Ministry of Health, Welfare and Sport of The Netherlands
- ❖ The Forum took place in Amsterdam, the Netherlands on 10-11 May 2017
- ❖ For more information, please see <http://www.fairpricingforum2017.nl/home>

The Humanitarian Mechanism

Launched by WHO, UNICEF, MSF and Save the Children in May 2017

- ❖ **Facilitating timely access to supply** for populations facing **humanitarian emergencies**
- ❖ Through CSOs, Governments or UN Agencies
- ❖ Currently covers **PCV** vaccines through CSOs and UN agencies at US\$ ~ 3 per dose
- ❖ **Used 7 times** (+3 during pilot phase) **reaching ~360,000 children**
- ❖ We **encourage all vaccine manufacturers to participate** with additional relevant products



Overview of other efforts

- WHO: regulatory efforts (e.g. WHO PQ; WHO-NRAs Collaborative Procedure for registration of Pqed products; harmonization, convergence, reliance efforts for registration and Post approval changes)
- WHO Affordability and budget impact analysis, negotiation skills trainings
- UNICEF – MIC tenders + strengthening procurement, VII revolving fund
- Gavi – ATAP and potential role post transition
- Regional pool procurement efforts

Thank you!



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