There is sufficient availability of DTwP standalone vaccine supply to meet country needs, as country demand through UNICEF for this product is low.

- **Schedule and Delivery**
  - Med: DTwP supply coverage and lead time are moderate for WHO-detailed reference biannual vaccine manufacturer with wide capacity in mid-2019, and another PQL supplier experiencing supply interruptions, even though others are producing in maximum capacity, with a high dependency on a main supplier.
  - Low: UNICEF will monitor closely market developments and maintain dialogue on next generation vaccines.

- **Opportunity for Intervention**
  - Med: UNICEF will continue to work on encouraging suppliers to give UNICEF access to sufficient supply of DTwP at an affordable price level.
  - Low: There is sufficient availability of DTwP standalone vaccine supply to meet country needs, as country demand through UNICEF for this product is low.
  - Med: UNICEF will work with countries to shape demand and improve demand certainty. Engage additional suppliers to obtain prequalification for their products so there is a balance of supply and competition through encouraging new market entrants.

- **Recommendations**
  - Continue on a quarterly basis in order to communicate requirements to suppliers, industry and regulatory bodies in the region.

**Sources:**
**Malaria Vaccine**

- Low
- Medium
- High
- Ultra-high

UNICEF supporting pilot implementation to establish evidence for SAGE policy recommendation which is expected by end of 2021 for RTS,S. No competitive products expected over the next 5-7 years. Immediate actions required under WHO lead to de-risk supplier investments to continue bulk production to avoid a situation where a policy recommendation is issued but supply would need to be re-launched by 3-5 years to access.

**Antibiotics (ARVs)**

- High
- Medium
- Low
- Ultra-high

**Antibiotics (ARVs) Adult 1^st Line**

Low

Demand forecast and importation remain, UNICEF to encourage improved demand forecasting.

**Antibiotics (ARVs) Adult 2^nd Line**

Med

The lowest prices available are still at a level double that of frontline treatments. A higher price is charged by originators for middle-income countries. There is minimal competition for the market entry of generic suppliers due to intellectual property rights and active pharmaceutical ingredient costs. Demand forecast and importation remain, UNICEF to promote more accurate demand forecast

**Antibiotics (ARVs) Paediatrics**

Med

Improve and coordinate procurement and advocacy based on ARTs formulary. Improve and ensure sustained availability and demand forecast accuracy, especially for piped dual formulations (LpLm, ABV, SCT, RAL, as well as B as for purpose formulations).

**Antimateriel**

Med

Some Antimateriel formulations are single sourced. UNICEF encourages improved quantification, forecasting, and supply chain system strengthening. Semi-synthetic and drug-based antimateriel products are treated in the same as far as possible in the injectable component.

**Infectable Gramnegative**

Med

UNICEF awards allocated based on total landed cost and sustainability factor considerations, and bundled awards with AD Syringes and RUPs.

**Benzthiazine Benzy/Phenyl**

Med

UNICEF and the Alliance partners produced freeze-prevention guidelines to support introduction of the new technology among MoH and CO’s. SD actively promotes the

**Ammonium Dispersible Tablets (AD)**

Low

Review requirement and encourage manufacturers to switch from oral suspension to dispersible tablet formulation, as well as to encourage local African production with GMP compliance. Expand the supply base for Amoxicillin.

**Cold-Refrigation Salts (CRS) and zinc**

Low

Through CIOPS the price on pack has been reduced in the WHO essential medicines list and offering is increasing compared to OOP only, still very few manufacturers of the off-pack available in program countries. Currently, only one supplier from Africa region on LTA. Continue to support and expand supplier base in high burden program countries.

**Pharmaceuticals**

- Low
- Medium
- High
- Ultra-high

**Intermittent Powder (MNP)**

Med

Joint tender with UNFPA to expand supply base of WHO prequalified products and maintain geographical diversity of suppliers.

**Mepiprostil**

Med

Support injectable formulation manufacturers in developing RFP for purpose product while monitoring the off-take of gel formulation against oral formulation products with a view to establish the local formulation.

**Naratriptel**

Med

Continue to monitor the demand trend considering additional demand for use in COVID impact and increase the supplier base particularly for injectable formulations.

**Magnesium Sulphate (MSD)**

Med

Expand supplier base and induce: WHO prequalified supplies through the joint tender with UNFPA. Continue support to have more WHO prequalified suppliers and monitor the demand trend.

**Non-Communicable Diseases (NCDs)**

- Med
- Low
- Ultra-high

**Insulins**

Low

Limited competition and supplier base of quality assured products. Varying and wide price ranges between countries. Monitor the demand trend and increase the supplier base of quality assured base and continue to work with the industry to improve affordability and expand supplier base. Support manufacturers to have WHO prequalified products and strengthen the supply chain for insulin in LMICs in order to improve access and increase demand for the product.

**Nutrition**

- High
- Medium
- Low
- Ultra-high

**Therapeutic Milk**

Medium

The introduction of ready-to-use therapeutic food (RUTF) remains UNICEF’s number one nutrition commodity in volume and value. Prenatal formulations remain the standard, while RUTF with alternative formulations will be gradually entering the market. UNICEF will encourage programmes country production where strategically important and competitive. Of sourcing from 50% from manufacturers located in programmed countries exceeded since 2016. UNICEF to improve quality spaces through the RUTF Codex guideline, and maintain competition by sharing market information and price transparency. Continue pursuing a 10% WAP decrease by 2021 to improve access to supply and treatment with available funding. Because of the geographically widespread and large supplier base, transport manly by sea, accelerated competition and pre-positioning, the RUTF supply chain has been impacted less by COVID-19.

**Micronutrient Powder (MNP)**

Medium

The inclusion of MNPs in WHO’s ERL will encourage governments to make point-of-use fortification with MNPs part of their essential primary health package. The publication of the LSP Micronutrient for MNPs is providing an internationally quality reference for producers and procurors. Current demand for MNPs remains limited. As expected, the supplied buffer base and buffer stock in Copenhagen have sufficient capacity to absorb any spikes in demand and need for customized packaging.

**Vitamin A**

Med

Expand the limited supplier base by encouraging new suppliers to develop a quality product. Market approach and product assessment jointly with Nutrition International. Buffer stock in SC warehouse for emergencies and country procurement.

**Iron-Folic Acid (IFA) Tablets**

Low

Supplier base has expanded for standard iron-Folic Acid products with multiple suppliers per product. UNICEF has awarded supply to new and improved products supported for better use convenience and for specific target groups in support of global anemia targets.

**Long-Leading Iron-folic Acid (LFA)**

High

Continuous partnership-driven coordination and global forecasting (GFATM, CDAG) encourage multiple country product registries to increase product choices at country level and competition, rationalise product specifications, encourage suppliers to increase container stuffing capacity to optimise and reduce transport cost.

**Malanian Vector Control**

- Medium
- Low
- High
- Ultra-high

**Auto-disable (AD) Syringes**

Med

Singe demand volumes in anticipation of COVAX vaccine roll out has reduced access availability within the market. There is anticipated adequate availability however this needs to be closely monitored and is reliant on accurate forecasts. There is anticipated longer lead times required, especially for non-forecasted quantities. UNICEF priority will be to support routine immunisation and COVAX-coordinated demand. UNICEF delays supply allocated based on total landed cost and sustainability factors, and awarded specific supply targets for bundled awards and new local producers. Positive outcome from bundled AD syringes with safety boxes: Sealing producers closes to key programme countries (notably Africa).

**Safe Injection Equipment (SIE)**

- Med
- High
- Low
- Ultra-high

**Conventional Dispensable Syringes**

Med

Flying out of disposables syringes for vaccine vaccination, and replacement with sale injection devices: i.e. re-usable prevention (RUP) feature syringes, ideally with sharp injury protection (SIP) features.

**Re-use Prevention/RUP Syringes**

Med

New joint WHO/UNICEF injection safety policy issued promoting the exclusive use of RUPs for vaccine reconstitution will increase overall demand for these products. WHO/UNICEF will co-locate RUP syringes for vaccine reconstitution.

**Re-use Prevention/RUP Syringes with sharp injury protection (SIP) features**

Med

New joint WHO/UNICEF injection safety policy issued promoting the exclusive use of RUPs for vaccine reconstitution will increase overall demand for these products. Even though SIP feature products are more expensive.

**Cold Storage**

Low

UNICEF awards allocated based on total landed cost and sustainability factor considerations, and bundled awards with AD Syringes and RUPs.

**Cold Boxes / Vaccine Carriers**

Med

UNICEF and the Alliance partners developed freeze-prevention guidelines to support introduction of the new technology among MoH and DoS. SD actively promotes the shift to new products and increases range of product range as they become WHO prequalified.

**Backup Refrigeration Systems**

High

UNICEF leveraging Gavi Cold Chain Optimization Platform (CCOP) to consolidate country demand; post-volumes, increase competition; and improve affordability. Procure service packages for device installation and training, as well as increase efforts to collect performance data and evidence.

**Solar Direct Drive (IDD) Refrigeration Systems**

High

UNICEF leveraging Gavi Cold Chain Optimization Platform (CCOP) to consolidate country demand, post-volumes, increase competition, and improve affordability. Procure service packages for device installation and training, as well as increase efforts to collect performance data and evidence.
In spite of the busy year due to Covid-19 outbreak great improvement of generating demand for procured Zika tests under the USAID project. Two projects ongoing with Med High Low currently there are already 4 WHO prequalified products available on market and also available for procurement through UNICEF SD, seeking to increase demand. The markets have stabilized since the start of the COVID pandemic and prices are dropping to their normal levels. Maintain current strategy to stockpile the products and new ITB and LTA established Q3 2020. New orders placed availing delivery. No change in either specification or strategy is foreseen till 2023. Maintain current expanded capacity. Innovation underway to meet higher requirements for accuracy of reading and data transfer in surveys. Oxygen Concentrators Low Med UNICEF seeks to ensure access to quality and fit-for-purpose products by assessing product specifications and engagement with partners in relevant oxygen forums (Every Breath Counts, U4O, etc.) £2.26M funding is expected to be released in 2021 from FCDO via COVID action, a UK-based consortium, for the oxygen concentrator re-think and increasing supply security. UNICEF worked and will continue work closely with global procurers to make ensure there is no stock-out in countries and to address the issues globally. Encouraging partners to develop and monitor QA and performance standards to address quality concerns.
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<thead>
<tr>
<th>Water Sanitation</th>
<th>Hand Pumps</th>
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<tr>
<td>Water Purification Tablets</td>
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UNICEF Supply Division together with Regional Offices are assessing local/regional markets on spare parts, maintenance and installation for public domain handpumps.

UNICEF Supply Division (SD) is working with other partners (the Humanitarian Innovation Fund (HIF), WHO, etc) to assess alternatives to chlorine-based water treatment products. SD has published product guide on Household water filters, is planning to organise webinars with RO/CO staff and will look at field trial options in 2021 for product validation. In 2021, UNICEF SD will support a research on the end use of chlorine tablets (TOR / concept note).

Market shortcomings are described as minimal / not present (green), moderate (orange), and severe (red).

Composite severity of market shortcomings for each product is assessed as none, mild, moderate, moderate-to-severe, and severe.

Level of opportunity for market intervention, based on practical and strategic considerations as low, medium, or high.

Modelled after the UNITAID Market Dynamics Dashboard.

We welcome users' feedback either online as comments or via email.

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