



# Maternal, Newborn, Child Health and Nutrition Market Assessment: Kenya

## SUMMARY FINDINGS



RESULTS FOR  
DEVELOPMENT

May 2025

## Contents

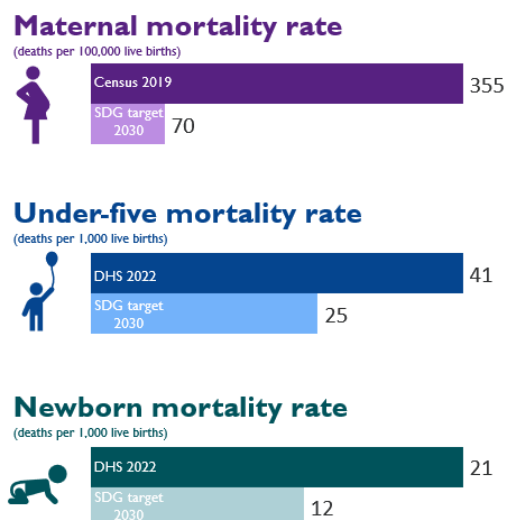
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## Introduction

Every year, about 5 million children die before their fifth birthday<sup>1</sup> and 300,000 mothers die due to pregnancy or childbirth related causes.<sup>2</sup> Countries – including Kenya – are not on track to achieve Sustainable Development Goals for reducing preventable maternal, newborn, and under-five mortality by 2030 (Figure 1).<sup>3</sup> The Maternal Newborn and Child Health and Nutrition (MNCH-N) Market Assessment provides insights to what extent – and why – healthy market characteristics do or do not exist for MNCH-N products. Findings from this assessment may be utilized to inform investments to improve access to life-saving products, and thus reduce maternal, newborn, and child mortality.

Figure 1. Maternal, under-five and newborn mortality rates.



## Approach

The MNCH-N Market Assessment explored the extent to which healthy market characteristics exist for 15 emerging and established products (Figure 2). In Kenya, four additional MNCH-N products were prioritized for inclusion in the market assessment at the request of the Government: caffeine citrate, phytomenadione (vitamin K1), surfactant, and tetracycline eye ointment.

Figure 2. Products included in the MNCH-N Market Assessment

	Newborn & Child	Maternal
<b>Emerging:</b> new product which needs to gain market share from incumbent product (if one exists)		<ul style="list-style-type: none"> <li>Calibrated drapes</li> <li>Ferric carboxymaltose (inj)</li> <li>Heat stable carbetocon (inj)</li> <li>Multiple micronutrient supplement (UNIMMAP formulation)</li> </ul>
<b>Established:</b> mature product which faces stockouts or quality challenges	<ul style="list-style-type: none"> <li>Amoxicillin (DT/OS)</li> <li>Gentamicin (inj)</li> <li>Dexamethasone (inj)</li> </ul>	<ul style="list-style-type: none"> <li>Azithromycin (solid oral)*</li> <li>Iron folic acid (solid oral)</li> <li>Ferrous salt (solid oral or OS)</li> <li>Folic acid (solid oral)</li> <li>Magnesium sulphate (inj)</li> <li>Misoprostol (solid oral)</li> <li>Oxytocin (inj)</li> <li>Tranexamic acid (inj)*</li> </ul>

\*established in market but new MNCH-N use-case

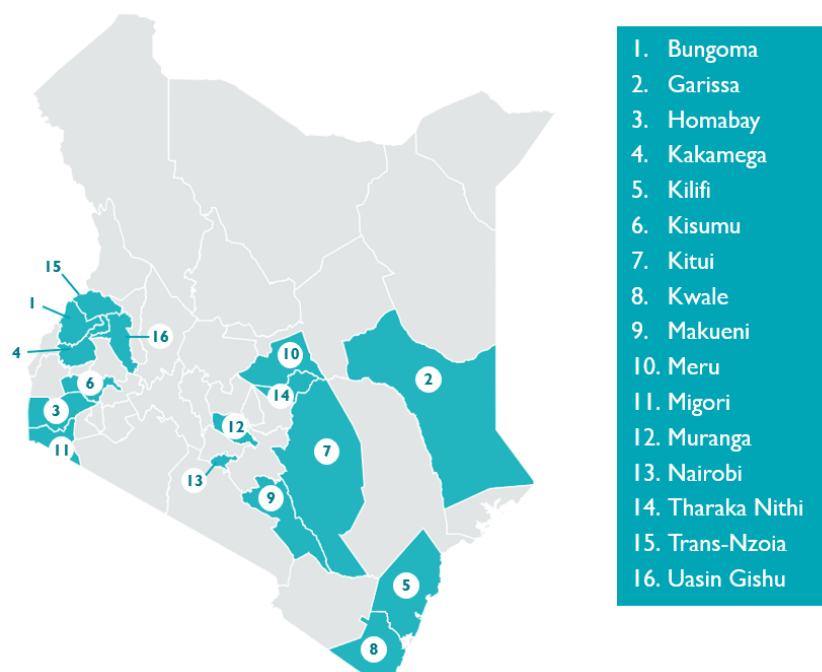
The assessment took an iterative, hypothesis-driven approach, to understand if – and to what extent – healthy market characteristics existed in a country market for the 15 emerging and established MNCH-N products (Figure 3). This approach was grounded in primary data collection, which included national policies and guidelines, procurement volumes and prices, financing values, supplier registration data, import/export data, point of sales data, and key informant interviews. Data was collected in 2024 and included retrospective data across 2019-2023.

Figure 3. Healthy Market Characteristics



In Kenya, the assessment was conducted at the national-level and in 16 counties (Figure 4). Counties were selected with input from the Council of Governors and Ministry of Health based on maternal and child mortality, population size, and government and partner priorities for MNCH-N interventions.




Figure 4. Kenya counties included in MNCH-N Market Assessment



## Market Size

The annual total market size for the 15 priority MNCH-N products is approximately USD \$13.0 million [approximately KSH 1,67 billion]. Table 1 details the estimated total annual market value for each of the priority products, as well as the estimated portion of the market procured through KEMSA and MEDS for public facilities.

Product	TOTAL Annual Market Value (USD) Public + Private	% TOTAL market procured through KEMSA or MEDS for public facilities	Confidence Level
Amoxicillin DT/OS	\$ 2,306,858	41%	High
Azithromycin capsule/tablet	\$ 4,385,479	32%	High
Calibrated drapes	N/A – no data reported across sources in 2019-2023		
Dexamethasone injection	\$ 982,255	5%4	High
Ferric carboxymaltose injection	\$ 90	0%	Low – minimal sales reported among private retailers and facilities
Ferrous sulphate	\$ 44,932	100%	Low – data only for public facilities
Folic acid	\$ 114,632	24%	Medium
Gentamicin injection	\$ 598,962	30%	Medium
Heat stable carbetocin injection	\$ 553	100%	Low – difficult to estimate size of emerging market based on historical data
Iron folic acid	\$ 671,042	81%	High
Magnesium sulphate injection	\$ 234,028	21%	Low – highly variable volumes across years making it difficult to estimate an average annual market size
Misoprostol tablet	\$ 1,004,264	6%	High
Multiple micronutrient supplement (UNIMMAP)	N/A – no data reported across sources in 2019-2023		
Oxytocin injection	\$ 2,232,347	14%	Medium – export data not inclusive of known suppliers from China and Europe
Tranexamic acid injection	\$ 433,052	37%	Medium – private sector market size not inclusive of known Kenya supplier
<b>Total</b>	<b>\$ 12,963,010</b>	<b>29%</b>	

	Approach A – point of sales data
	Approach B – export data
	Approach C – central procurement data

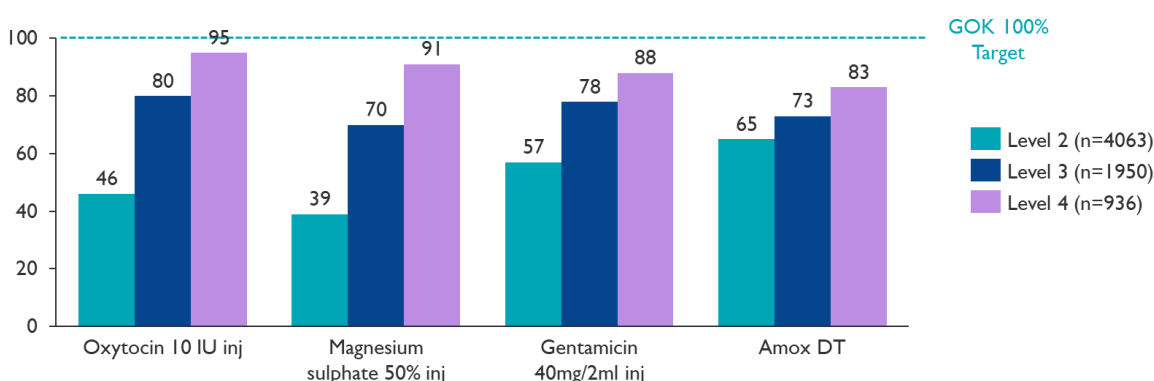
Estimating the market size is more of an art than a science given available data is incomplete and of uncertain accuracy. To estimate the market size, three separate approaches were utilized based on the data available for each product:

- **Approach A – point of sales data<sup>4</sup>:** This approach extrapolated point of sales data from the Maisha Meds network of +1,250 facilities and retail outlets in Kenya. Product sales data was collected and analyzed from 2023, and a projected total market annual sales size was estimated across the ~18,800 private health facilities in Kenya, which in turn provided the estimated private sector market size. This was then combined with the average annual procurement amount from KEMSA and MEDS for public facilities to provide an estimated TOTAL market size. *Data limitations: (1) Maisha Meds network skews towards pharmacy retail outlets in peri-urban and urban areas, and thus may not provide the best indication of private consumers of injectables. (2) This approach may exclude volumes procured directly by facilities from the private sector or from partners, donors, and faith-based organizations not distributing to public facilities through KEMSA or MEDS.*
- **Approach B – export data<sup>5</sup>:** This approach relied on export data sourced by Maisha Meds from India, Indonesia, Hungary and – to some degree – from Bangladesh to Kenya using a third-party provider. The average annual market size per product was then estimated as the annual average volume exported to Kenya between 2018-2024. Based on Maisha Meds point of sales data and procurement data from KEMSA and MEDS, the portion of locally manufactured products in the market were then estimated. Export volumes plus locally manufactured volumes were added to estimate the TOTAL market. The average annual procurement amount from KEMSA and MEDS for public facilities was then subtracted from the TOTAL market to estimate the portion of the market procured for public facilities. This approach was used if available export data was deemed representative of the market, i.e., if Indian products accounted for >30% of the products' value at the pharmacy-level. *Data limitations: (1) Export data is not inclusive of all countries, and thus this approach only provides a partial picture of the market. (2) This approach may exclude volumes procured directly by facilities from the private sector or from partners, donors, and faith-based organizations not distributing to public facilities through KEMSA or MEDS.*
- **Approach C – central procurement data<sup>6</sup>:** This approach utilized the average annual procurement volumes from KEMSA and MEDS for public health facilities as a proxy for market size. This approach was used if either (1) data on the product was not available through point of sales or export data, or (2) the reported annual export volumes from India were less than the reported annual procured volumes from KEMSA and MEDS. *Data limitations: (1) This approach likely underestimates the total market size because it excludes volumes sold in the private sector – including volumes procured directly by public facilities from the private sector – and excludes volumes procured by partners, donors, and faith-based organizations not distributing to public facilities through KEMSA or MEDS.*

## Key Findings

The MNCH-N Market Assessment supports Kenya as it seeks to further reduce maternal, newborn, and child mortality by providing the critical evidence required to understand challenges inhibiting access to life-saving products needed to prevent or treat leading causes of maternal, newborn, and child mortality. The Government of Kenya (GOK) aims for 100% availability of MNCH-N products to ensure widespread access – a critical component to achieving Universal Health Coverage (UHC). However, availability of MNCH-N products remains low, particularly in Level 2 facilities where primary care-seeking occurs. Figure 5 provides availability of tracer MNCH-N products published in the Kenya DHS.<sup>7</sup> Low availability across these tracer products at Level 2 and 3 facilities suggests specific market interventions are required to address access challenges.

Figure 5. Product availability in public health facilities (Kenya Health Facility Census, 2023)



The findings below detail the extent to which healthy market characteristics exist across both emerging and established MNCH-N products in Kenya.



**Normative guidance is aligned to global recommendations for established products, however emerging products require further product introduction regulatory efforts.**

Kenya's regulatory environment is well positioned to support access and scale-up of priority MNCH-N products. All but four MNCH-N products included in the assessment have been adopted in Kenya's national Essential Medicine List (EML), Kenya National Medicines Formulary (KNMF), and treatment guidelines in alignment with WHO recommendations. Further product introduction efforts will be required assess the appropriateness of and/or to ensure there is an enabled regulatory environment for the following emerging products – or in the case of azithromycin, a new use-case:

- **Azithromycin** is already included on the EML or KNMF; however, it is not currently recommended in treatment guidelines for administration in all facility-based births to prevent maternal sepsis. While existing global evidence demonstrates positive health outcomes in using

azithromycin as a prophylaxis to prevent maternal sepsis, there is no WHO recommendation for this use-case. This new use-case will require further local research, piloting, and approval.

- **Ferric carboxymaltose (FCM)** is currently not included on the EML, KNMF, or in treatment guidelines for the treating severe anemia in pregnant women. WHO has not formally recommended use of FCM. However, despite not being in normative guidance, volumes were found to be in the Kenya private market – and procured directly from the private sector by counties and facilities.
- **Multiple micronutrient supplement (MMS) (UNIMMAP formulation)** is not included on the EML or in treatment guidelines. Multiple partners in Kenya are jointly working with the Ministry of Health, Division of Nutrition and Dietetics to support efforts to undertake implementation research and introduce MMS in counties through the MMS Taskforce.
- **Calibrated drapes** are not currently included in the Kenya Essential Medical Supplies List or in treatment guidelines. The use of calibrated drapes is currently being piloted in Kenya by partners in select facilities.

The EML documents the formal procedures which would need to be taken to formally adopt these emerging products in Kenya.



***Almost all MNCH commodity funding in Kenya is through government resources, but it is fragmented and insufficient.***

In Kenya, an estimated 98% of commodity funding comes from Government of Kenya resources, highlighting the sustainability of funding for these products (Figure 6).<sup>8</sup> However, government funding streams are highly complex and fragmented, with funds flowing through multiple national and county-level sources (Figure 7). This fragmentation makes it challenging at the county and facility level to identify which funding resources are available for commodity procurement, and at the national level it is difficult to measure the actual size of the MNCH-N commodity funding gap. County and facility officials relayed insufficient and complex funding channels as one of their most significant challenges when it comes to ensuring access to MNCH-N products.

*Figure 6. Average portion of MNCH-N product funding by source, public sector, 2019-2023*

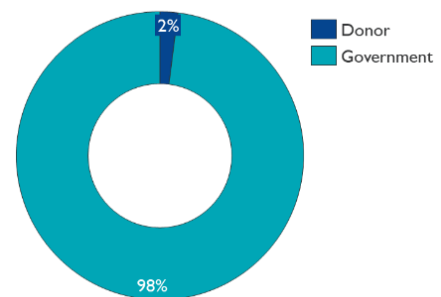
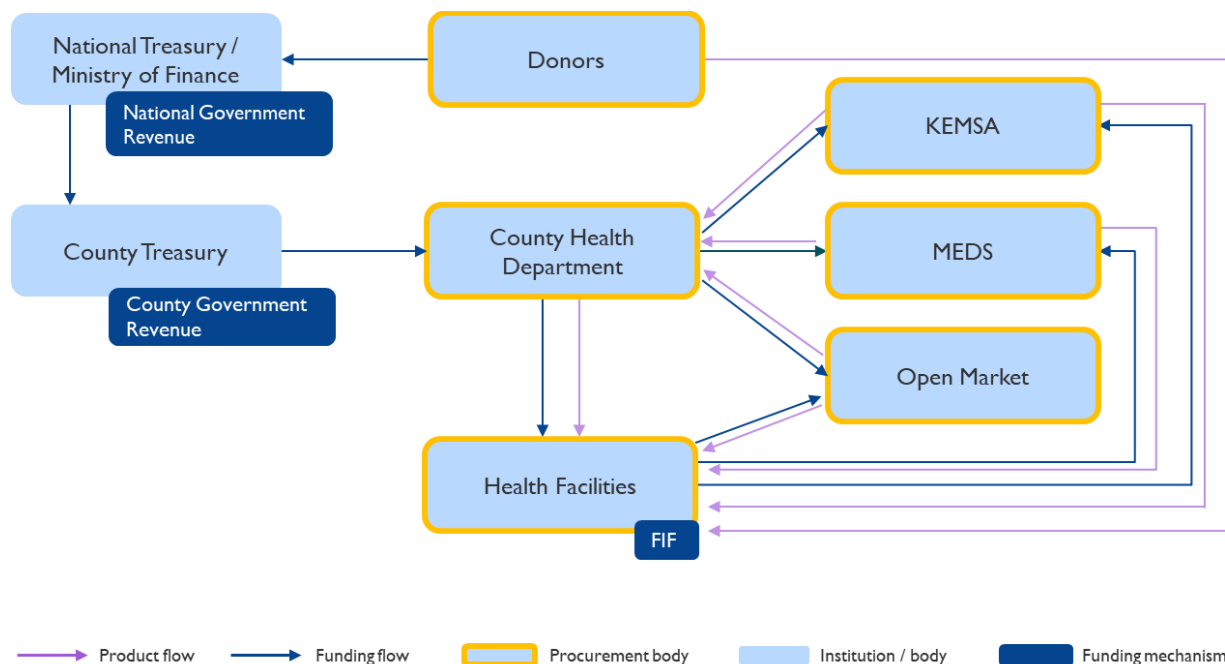


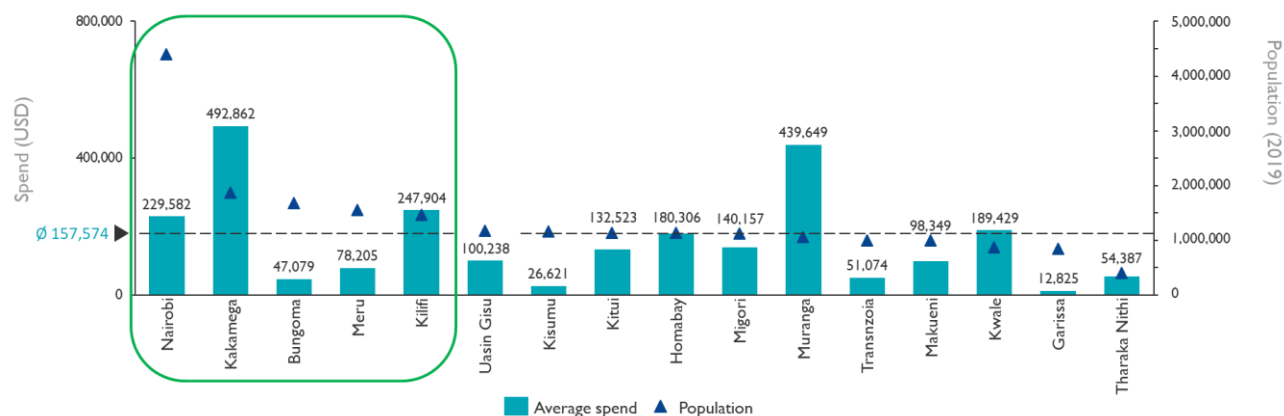


Figure 7. Map of funding and procurement flows for MNCH-N products in Kenya's public sector



Of equal concern in the Kenyan market, public sector spend on MNCH-N product procurement does not appear to be informed by burden. A detailed analysis of average annual spending across 16 counties demonstrates that county-level funding disbursed for MNCH-N product procurement does not correlate with population size. For instance, of the five counties included in the assessment with the highest population sizes (Nairobi, Kakamega, Bungoma, Meru, and Kilifi), average annual spend on MNCH-N product procurement varies significantly above and below the average annual spend of USD 158k annually (Figure 8).<sup>9</sup>

Figure 8. Average annual spend by county on MNCH-N products vs. populations, 2021-2023



On a positive note, Facilities Improvement Financing (FIF) appears to promote higher spending on MNCH-N products. FIF is a sort of revenue retention at the facility level that is being introduced across counties in Kenya. In 2024, 12 counties included in the assessment had access to FIF through the establishment of FIF Acts. On average, counties that had FIF spent 53% more on MNCH-N products compared to the four counties without (Figure 9).<sup>10</sup> FIF introduces a more direct way in which counties can fund procurement of MNCH-N products, and thus creates more flexibility for facilities to fulfill their demand. Moreover, this higher spend among counties with FIF is not attributed to higher prices, but rather higher procured volume. For instance, when looking specifically at amoxicillin DT, counties with FIF procured on average 41% more tablets compared to counties without FIF (Figure 10).<sup>11</sup> Additionally, the Social Health Insurance being rolled out under the Social Health Authority may positively impact MNCH-N product funding. Future assessments into the MNCH-N market should consider how this financing reform may change product access.

Figure 9. Average annual spend for FIF and non-FIF counties, 2022-2024 (USD)

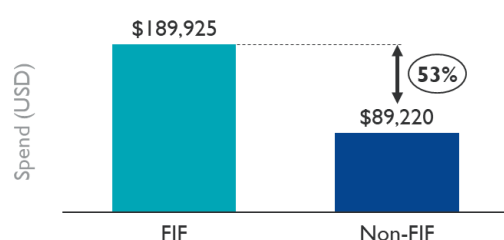
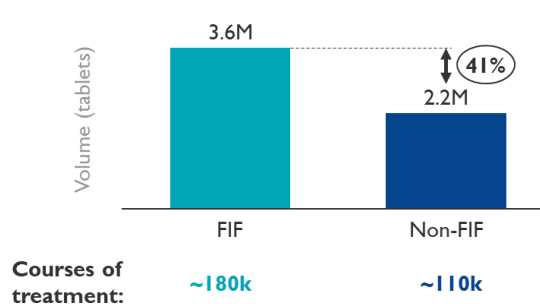


Figure 10. Average volume of Amox DT 250mg tablets procured 2022-2024



**Procured volumes are insufficient to meet demand, driven by fragmented quantification processes and multiple procurement sources, which leads to market inefficiencies.**

Procurement of MNCH-N products can be explored at multiple levels of the health system in Kenya. Given the devolved health system, counties and facilities are responsible for quantifying and procuring MNCH-N products. This is coordinated by the County Pharmacist, County Reproductive and Maternal Health Officer, and County Child Health Officer under the County Health Product Technologies Units. An analysis of county forecasting and supply planning exercises indicated that counties often lack the capacity to accurately quantify MNCH-N product demand, making it difficult to assess if demand is being fulfilled. The link between quantification, procurement plans, and annual country budget estimates is weak, and leads to large variance between what is quantified and made available; county orders are not based on true consumption, but more so based on what counties find available for ordering across various procurement channels – e.g., KEMSA, MEDS, or private sector suppliers. An analysis of county quantifications compared to procurement volumes shows that counties frequently under-fulfill their quantified demand. This under-fulfillment is driven by insufficient and delayed funding, leading to several procurement challenges:

- Counties accumulate outstanding debts with KEMSA, preventing further procurement.
- Inability to pay upfront for procurement from MEDS.
- Procuring from the private sector in small volumes due to higher costs.

For instance, three products (amoxicillin DT, IFA, and oxytocin) were consistently quantified and procured across 12 counties from 2021-2023. This allowed for comparison to understand fulfillment trends – of which there are high instances of under-fulfillment. For example, amoxicillin DT was under-fulfilled in 58.3% of cases, IFA in 75%, and oxytocin in 50% (Figure 11).<sup>12</sup>

Additionally, the precise procurement channels utilized vary significantly across counties. While it is beneficial in the short term to choose between channels to overcome immediate procurement and financing inefficiencies, this may lead to suboptimal outcomes due to poor market information transparency and decreased economies of scale in the long-term. An analysis of procurement data from 16 counties revealed that counties fall into three major archetypes:

1. Majority of procurement from KEMSA, with small supplementary procurements from other sources
2. Procurement split between KEMSA and MEDS
3. Majority of procurement from the private sector, with supplementary procurements from KEMSA or MEDS

Figure 12 depicts the decision tree counties outlined they follow when deciding which procurement channel to utilize. Counties tend to start with the KEMSA portal. If the product is available and there are no outstanding debts, they procure from KEMSA. If not, they turn to alternate channels like MEDS or the private sector. When choosing between whether to procure from the private sector or MEDS, counties often make decisions based on accessibility (i.e., there were previously reported challenges where MEDS did not offer last mile distribution), financing terms (i.e., MEDS requires upfront payment), and pre-formed agreements with specific suppliers. In some instances, MEDS has developed memorandums of understanding with counties to support overcoming procurement barriers related to last mile distribution and financing terms.

Again, Kenya's mixed public-private market provides counties flexibility to turn to private sector suppliers to fill immediate needs if they cannot procure life-saving MNCH-N products through KEMSA or MEDS. However, a deeper look at the private sector revealed concerns around high mark-up prices and quality, which if not addressed contribute to broader equity and access challenges. For instance, an

Figure 11. Average fulfillment of Amoxicillin DT 250mg, IFA, and Oxytocin across 12 counties, 2021-2023

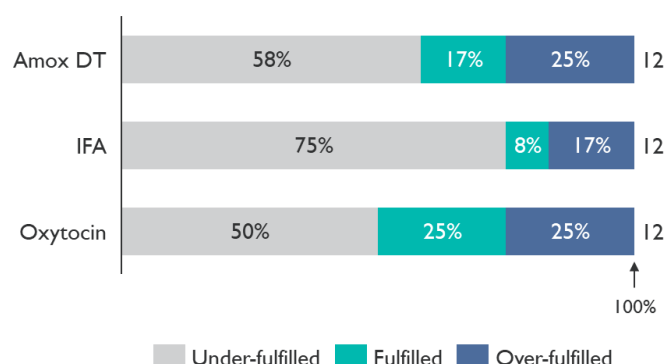
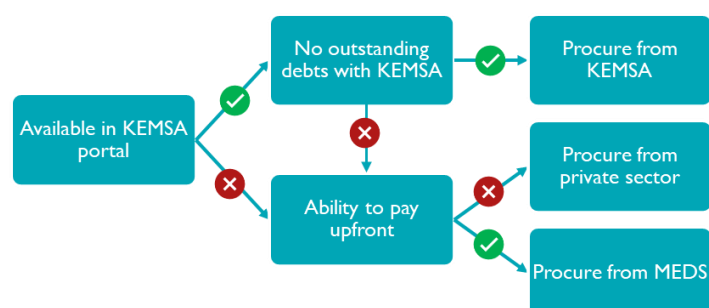
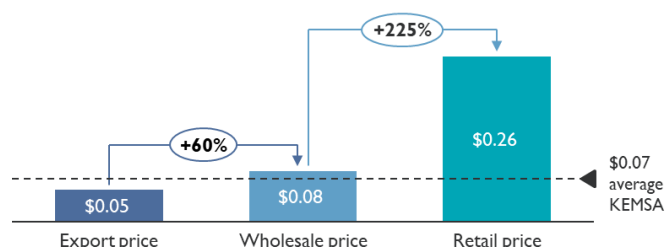


Figure 12. County MNCH-N product procurement decision tree



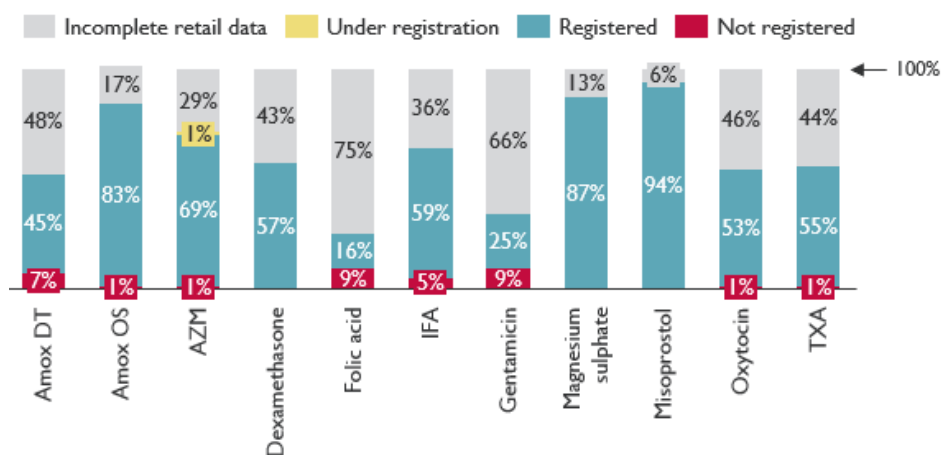
analysis of the mark-up price between the export, wholesaler, and retail level for priority MNCH-N products revealed that on average there was an 82% price mark-up between the export and wholesaler levels, and an additional 145% mark-up between the wholesale and retail levels.<sup>13</sup> The market assessment revealed that when counties – and especially facilities – procure directly from the private market, they often do so from the retail level. This means that they are likely paying high mark-up prices to purchase products and thus receiving reduced value for money compared to if they procured through KEMSA or MEDS. Figure 13 provides an indicative example of the mark-up price for dexamethasone.<sup>14</sup>

Figure 13. Dexamethasone 4mg/ml injection median prices per smallest unit of measure, 2019-2023 (USD)



Additionally, when counties and facilities procure directly from private sector wholesalers or retailers, it introduces greater quality risks. These products have not been vetted by central procurers like KEMSA or MEDS, and after market surveillance is more difficult to monitor the further one moves in the private sector supply chain. Based on a sample of private retailers, on average 2% of the value and 1% of the transactions involving the MNCH-N products sold in Kenya’s private sector were not registered with the Pharmacy and Poisons Board (PPB) (Figure 14).<sup>15</sup> These are recorded as “not registered” in the graph. *Note: in many instances, private retailers will record generics simply as “generic” when recording their stock, it makes this data difficult to reconcile with PPB registration records; in this instance the data is recorded as “incomplete retail data”.*

Figure 14. Portion of sales at private retailers by status of registration with PPB, 2019-2023

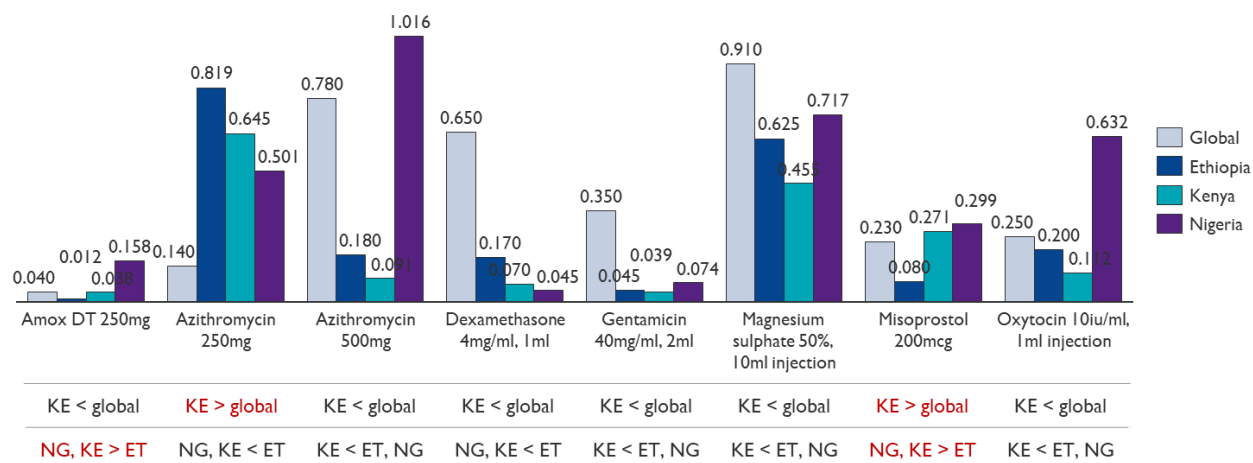


**Prices are highly variable across counties and procurement agents, likely a function of low market information and small order size due to fragmentation.**

To understand if MNCH-N procurement prices were competitive in the Kenya market, multiple triangulations were taken. First, average procurement prices in Kenya were compared to average procurement from international procurement agencies (i.e., UNFPA and UNICEF) and other comparator

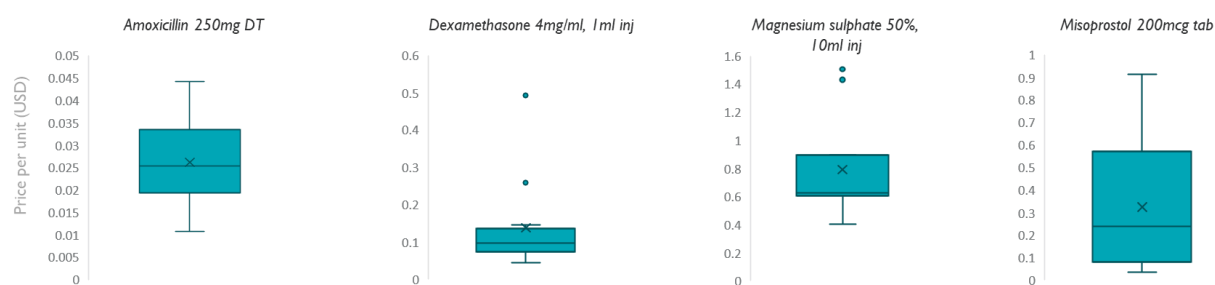
countries included in the MNCH-N Market Assessment (i.e., Ethiopia and Nigeria). This price comparison was conducted to understand (1) how variable MNCH-N product prices were across geographies and procures, and (2) to what degree prices in Kenya were or were not outliers from the average price range. When comparing average procurement prices in Kenya compared to these other reference points, Kenya's prices are often less than UNFPA/UNICEF prices and other countries (Figure 15).<sup>16</sup> This suggests that Kenyan procurers (KEMSA and MEDS) are sourcing competitive prices for MNCH-N products.

Figure 15. Weighted average procurement prices across Ethiopia, Kenya, and Nigeria compared to global prices per smallest unit of measure, 2019-2023 (USD)



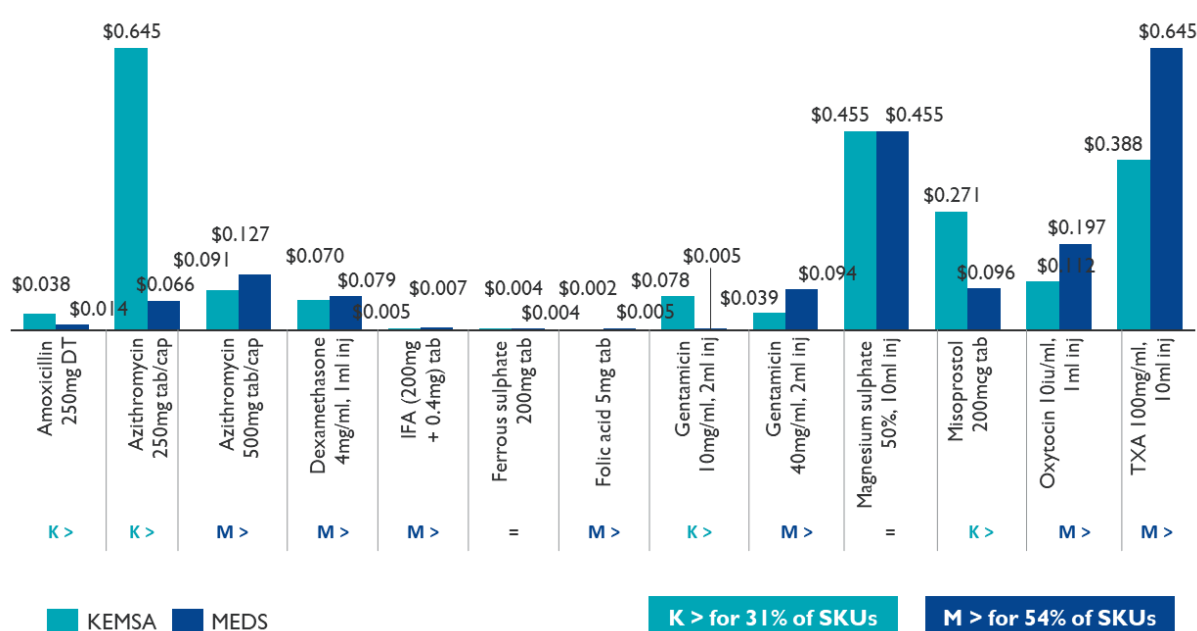
However, within Kenya there are concerns around high price variability between procurement channels, thus posing questions of equity and access. Price varies significantly county-by-county, likely due to differences in procurement channel usage and order size. This degree of price variation indicates the downstream impact of procurement inefficiencies on price and ultimately county access to commodities. Figure 16 provides examples of the range of average procurement prices across the 16 counties included in the MNCH-N market assessment for four products.<sup>17</sup> For example, most procurement prices for misoprostol fall between about USD \$0.10 to \$0.55 per tablet across counties, with the full range of prices reaching up to about USD \$0.90 per tablet. This high range suggests opportunities to support counties further in their procurement processes to reduce price variability.

Figure 16. Distribution of average country procurement purchase price across 16 counties, 2022-2024 (USD)



Additionally, the MNCH-N Market Assessment found instances of high price variability between procurement sources. Figure 17 compares the average procurement price between KEMSA and MEDS.<sup>18</sup> Across MNCH-N products, neither KEMSA nor MEDS is consistently more or less expensive than the other, however there are clear instances where these procurers are able to access products at significantly different price points (*NOTE: there was no significant difference in perceived quality of the suppliers*). From a market perspective, this indicates there are opportunities to optimize how counties procure from these different channels to improve their value for money. For instance, this could include improving the ability for counties to review both KEMSA and MEDS product portals upfront to evaluate available products and price, as well as pooling volumes across countries wishing to procure from MEDS to improve economies of scale.

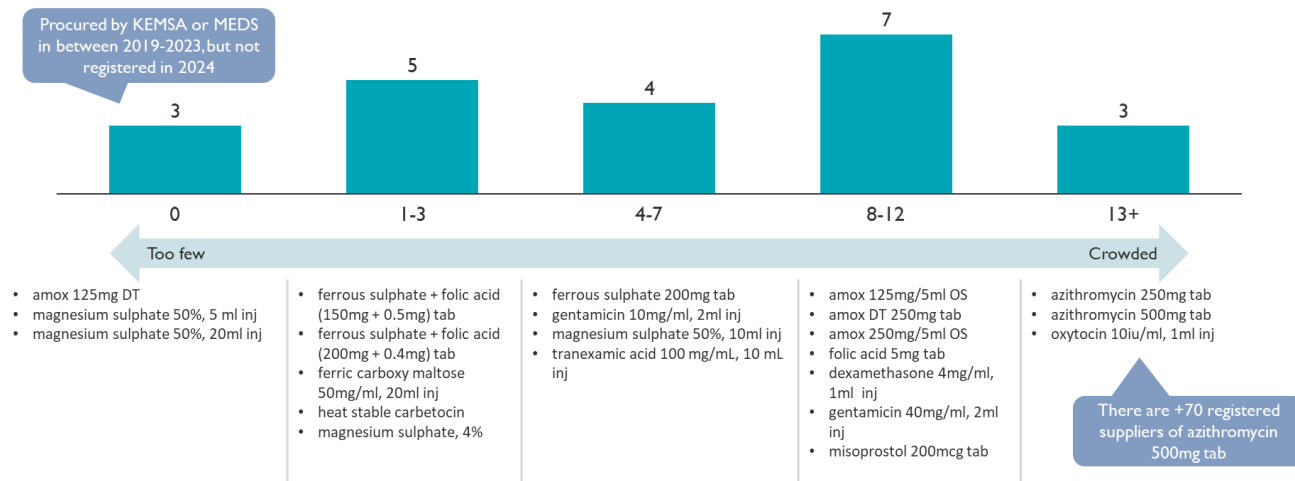
Figure 17. Weighted average procurement price per product, KEMSA and MEDS, 2019-2023 (USD)



**Kenya has a health supply base for most MNCH-N commodities, and a robust local manufacturing sector.**

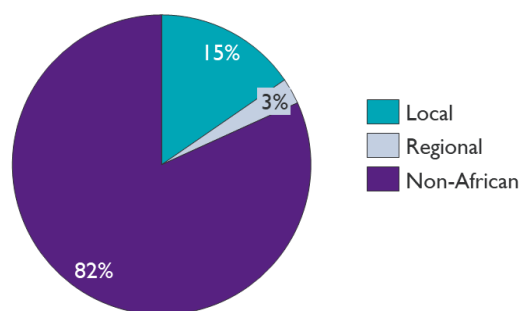
Most MNCH-N products have a healthy supply base in Kenya, which enhances supply security. Figure 18 depicts the range of the number of suppliers registered or listed with PPB for each MNCH-N product.<sup>19</sup> Of concern are products that have either too few suppliers to ensure supply security, or a highly saturated market which may lead to supply fragmentation and quality concerns. The PPB has recently embarked on a process towards attainment of WHO Global Benchmarking Tool Maturity Level 3 accreditation. If achieved, this would signify a stable, well-functioning and integrated regulatory system. Through this, Kenyan locally manufactured MNCHN products will likely attract a wider market base and target global health procurers, e.g., UNICEF, GAVI, etc.

Figure 18. Number of suppliers registered with PPB, 2024 (per SKU)



Additionally, Kenya's MNCH-N market is strengthened by its local manufacturing capacity. Across all MNCH-N products registered in Kenya, an estimated 15% are local suppliers (Figure 19).<sup>20</sup> Leading Kenyan manufacturers include Dawa, Lab & Allied, and Tasa, which produce a range of MNCH-N products such as amoxicillin, azithromycin, dexamethasone, ferrous sulphate, and magnesium sulphate. Based on market estimates from the Maisha Meds network of private retailers, Kenyan manufacturers account for an estimated USD \$1.5 million, or roughly 15% of the estimated total market size.<sup>21</sup> Further efforts to support local manufacturing capacity and quality will only strengthen supply security for MNCH-N products in Kenya in the future.

Figure 19. Location of MNCH-N suppliers registered with PPB, 2024



Leading Kenyan manufacturers of MNCH-N products

Manufacturer	Products
Dawa	amox OS, azithromycin
Lab & Allied	amox DT, amox OS, azithromycin, dexamethasone, ferrous sulphate, IFA, folic acid, magnesium sulphate
Tasa	gentamicin, magnesium sulphate, tranexamic acid



*There are few globally quality assured suppliers registered in the country, indicating more efforts are needed to align incentives on quality of MNCH-N products in the market.*

Lastly, in the MNCH-N market, there is a continued issues where globally quality-assured (QA'd) products are not accessible in country markets. In this instance, globally QA'd products are defined as products that have approval from the WHO Pre-qualification (WHO PQ) process or a Stringent Regulatory Authority (SRA). This is unique to the MNCH-N market compared to other product markets which have benefited from greater donor support, such as HIV, TB, malaria, and vaccines. This situation is alarming as it highlights a mismatch between the demand and supply of these life-saving products, thus undermining efforts to ensure equitable access to quality, affordable products for all women and children.

Given Kenya has a healthy overall supply based and strong mixed health system, it is concerning that there are still few globally QA'd suppliers registered and participating actively in the Kenyan market. This low participation of globally QA'd suppliers appears to be driven by low demand specifically for these products and perceptions among suppliers that it is a “high risk” market. These perceptions are supported by findings in this market assessment where less than 6% of the MNCH-N suppliers procured from by KEMSA and MEDS are globally QA'd (Figure 20). Global QA mechanisms should not be perceived as undercutting the authority of Kenya's PPB, but rather supporting PPB's efforts to ensure high-quality products are accessible. Market interventions to increase the participation of these globally QA'd suppliers could improve overall effectiveness of healthcare delivery for maternal, newborn, and child services in Kenya.

*Figure 20. Globally QA'd suppliers procured by KEMSA or MEDS, 2019-2023<sup>22</sup>*

S/N	QA Approval	Supplier	Product	Manufacturer location
1	WHO PQ / SRA	Sandoz	amoxicillin 250mg DT	International
2	WHO PQ / SRA	Pfizer	azithromycin 250mg tab/cap	International
3	Procured by Global Fund	Lab and Allied	azithromycin 500mg tab/cap	Kenya
4	WHO PQ / SRA	Wockhardt	azithromycin 500mg tab/cap	International
5	WHO PQ / SRA	Macleods	azithromycin 500mg tab/cap	International
6	Procured by Global Fund	Unisel	azithromycin 500mg tab/cap	N/A
7	WHO PQ / SRA	Pfizer	misoprostol 200mg tab/cap	International

## Conclusion and Recommendations

The MNCH-N Market Assessment in Kenya provides a comprehensive analysis of to what extent healthy market characteristics exist for these life-saving products. Based on these findings, Kenya's regulatory environment is conducive to facilitating the introduction and scale-up of MNCH-N products, with clear pathways to support adoption of new and emerging products. Additionally, Kenya has a strong supply base for most MNCH-N products, and supply security is further strengthened by its robust local manufacturing sector. In Kenya, the most opportunities for improving access to MNCH-N products lie in



addressing the negative impacts of procurement and financing fragmentation within the market, which currently results in price and quality concerns. **There are numerous solutions that can and should be explored to optimize the variety and flexibility of the various procurement and funding channels the public sector has access to fulfill its MNCH-N product demand – this includes how to leverage private sector actors.** The table below provides strategic recommendations based on these findings, and in consultation with MNCH-N stakeholders in Kenya.

Period	Strategic Recommendations
Short-term	<ul style="list-style-type: none"> <li>• <b>Foster greater collaboration</b> between public and private sector MNCH-N actors to improve market transparency and partnership.</li> <li>• Further <b>investigate global evidence and appropriateness of emerging products</b> in the Kenyan market to support improving MNCH-N health outcomes, and if found positive, initiate official processes for future product adoption.</li> <li>• Invest in <b>nation-wide training for providers</b> to ensure proper uptake and utilization of priority MNCH-N products.</li> <li>• Provide <b>training and tools to support improved county and facility capacity</b> to identify and monitor commodity funding resources, quantify products, and make procurement decisions.</li> <li>• Build a <b>financing roadmap</b> to transition to both sufficient and sustainable funding resources for priority MNCH-N commodities over the next 10 years.</li> <li>• Develop a <b>list of private sector wholesalers/distributors marketing reliable, quality-assured MNCH-N products</b> counties and facilities can procure from.</li> </ul>
Medium-term	<ul style="list-style-type: none"> <li>• Invest in <b>strengthening national data management systems</b> to improve ability to communicate and monitor stock and consumption across facilities and central-level procurers.</li> <li>• Deploy <b>innovative financing mechanisms targeted at counties, facilities, and procurers</b> (KEMSA and MEDS) to reduce risks and create mutually beneficial financing terms.</li> <li>• <b>Strengthen capacity of local manufacturers</b> to produce and market quality MNCH-N products.</li> <li>• <b>Improve post-market quality surveillance</b> to reduce the number of unregistered products sold in the private sector.</li> </ul>

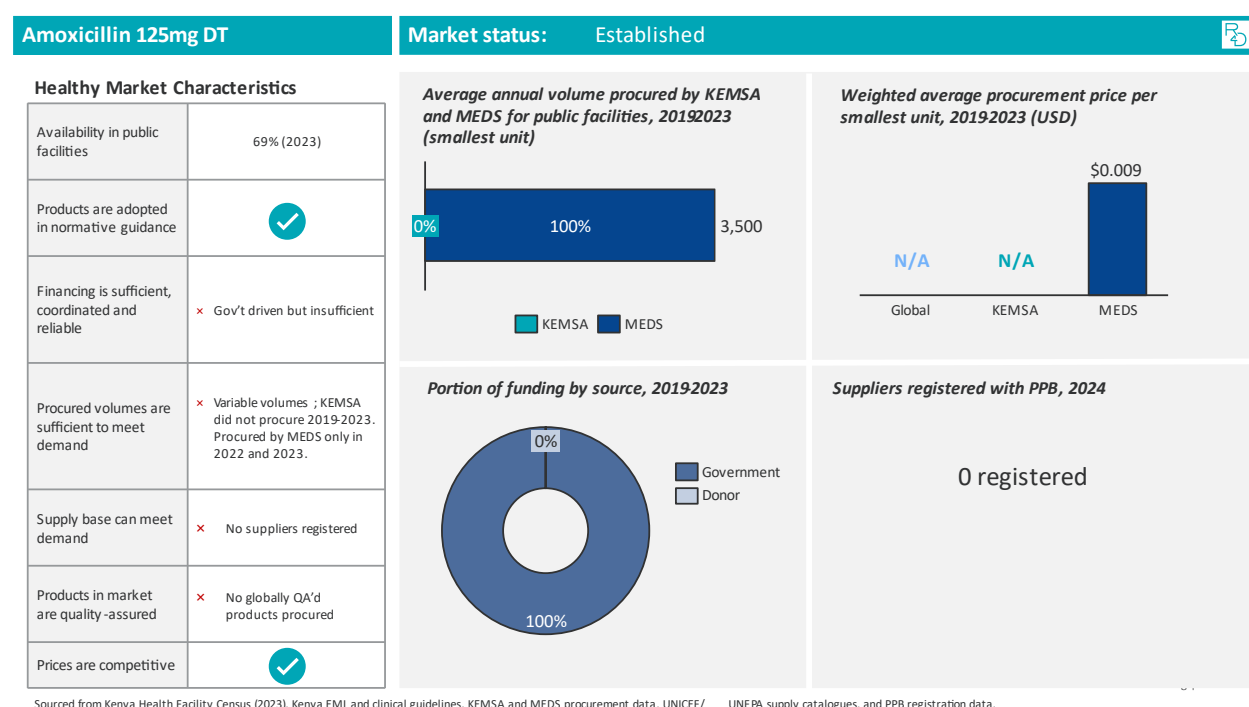
The findings from this assessment aim to inform investments and interventions to improve access to life-saving MNCH-N products, and thus further efforts to reduce preventable maternal, newborn, and child mortality in Kenya. Further insights on specific products can be found in the Annex of this report.

For additional information or questions related to the MNCH-N Market Assessment in Kenya, please contact Samantha Durdock, Project Lead ([sdurdock@r4d.org](mailto:sdurdock@r4d.org)).

## Annex - Product Snapshots

Product snapshots provide a summary description of each MNCH-N product included in the market assessment. In Kenya, product snapshots were included for the 15 MNCH-N products originally included in the market assessment, as well as four additional products the government prioritized: caffeine citrate, phytomenadione, surfactant, and tetracycline. These snapshots aim to provide an indicative understanding of where each product stands in relation to healthy market characteristics, as well as provide supporting data to describe the clinical use-case, market size, procurement prices, key sources of funding and procurement, and supply-base.

### Newborn and Child Health



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/ UNFPA supply catalogues, and PPB registration data.

## Amoxicillin 250mg DT

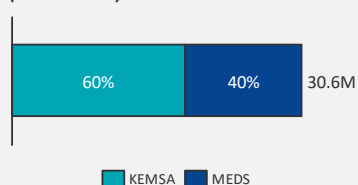
Market status: Established



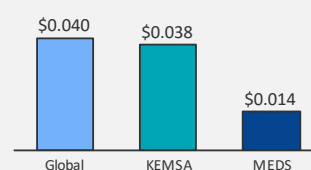
### Healthy Market Characteristics

Availability in public facilities	69% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Variable volumes ; KEMSA significantly "over procured" in 2020, but did not procure in 2021-2023.
Supply base can meet demand	✓
Products in market are quality-assured	✗ Limited volumes of globally QA'd products procured
Prices are competitive	✓

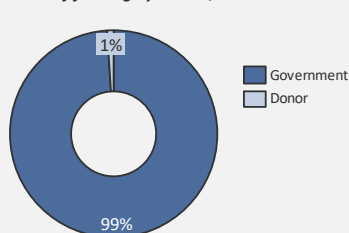
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



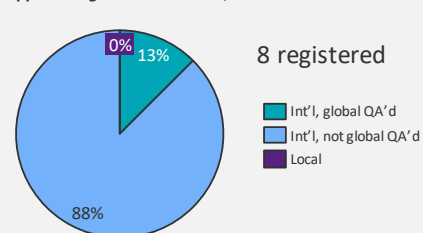
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/ UNFPA supply catalogues, and PPB registration data.

## Amoxicillin 125mg/5ml OS

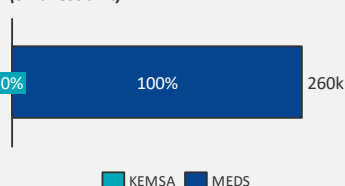
Market status: Established



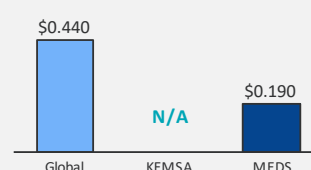
### Healthy Market Characteristics

Availability in public facilities	69% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Decreasing volumes ; MEDS procured less than quantified volumes in all years by a factor of roughly 10x. ✗ Not procured by KEMSA 2019-2023
Supply base can meet demand	✓
Products in market are quality-assured	✓
Prices are competitive	✓

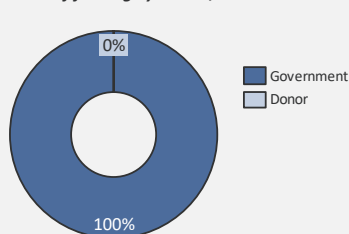
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



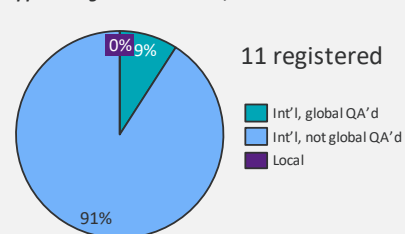
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/ UNFPA supply catalogues, and PPB registration data.

## Amoxicillin 250mg/5ml OS

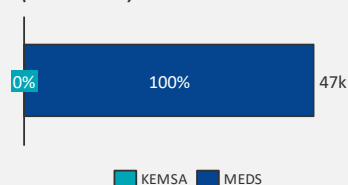
Market status: Established



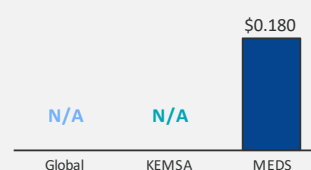
### Healthy Market Characteristics

Availability in public facilities	69% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Variable volumes ; MEDS procured less than quantified volumes in all years by a factor of roughly 11x. ✗ Not procured by KEMSA 2019-2023.
Supply base can meet demand	✓
Products in market are quality-assured	✓
Prices are competitive	✓

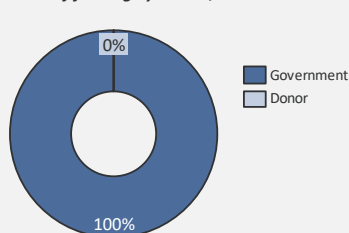
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



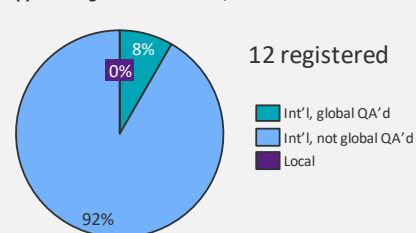
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Dexamethasone 4mg/ml, 1ml ampule

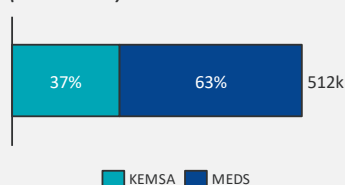
Market status: Established



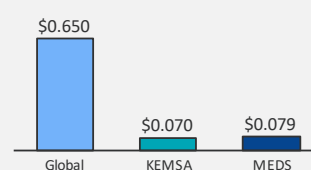
### Healthy Market Characteristics

Availability in public facilities	45% (2018)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't funded but insufficient
Procured volumes are sufficient to meet demand	✗ Variable volumes, partially driven by COVID demand
Supply base can meet demand	✓
Products in market are quality-assured	✗ No globally QA'd products procured + price concerns (see below)
Prices are competitive	Country price at least 5x cheaper than global price, suggesting possible quality issue in country

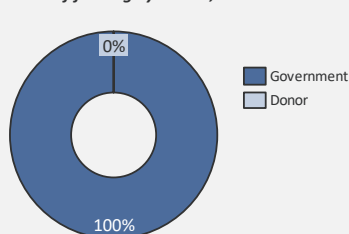
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



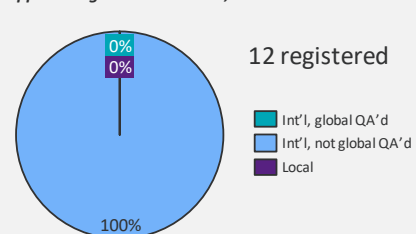
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Gentamicin 10mg/ml, 2ml ampule

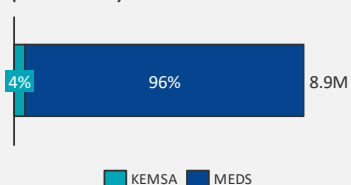
Market status: Established



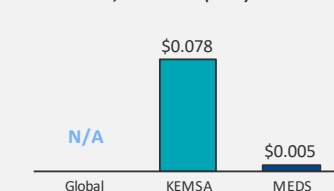
### Healthy Market Characteristics

Availability in public facilities	67% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Variable volumes; in 2020, 2022, and 2023, KEMSA and MEDS procured more than they quantified.
Supply base can meet demand	✓
Products in market are quality-assured	✓
Prices are competitive	✓

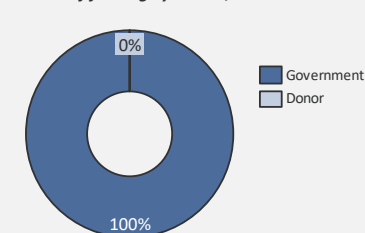
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



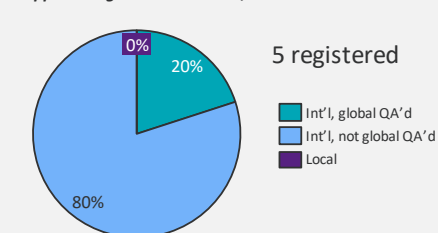
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Gentamicin 40mg/ml, 2ml ampule

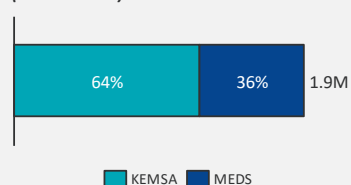
Market status: Established



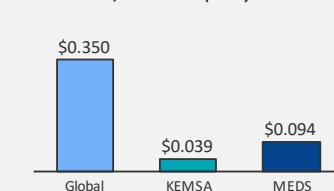
### Healthy Market Characteristics

Availability in public facilities	67% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✓
Supply base can meet demand	✓
Products in market are quality-assured	✗ No globally QA'd products registered + price concerns (see below)
Prices are competitive	Country prices at least 6x cheaper than global price suggesting possible quality issue in country

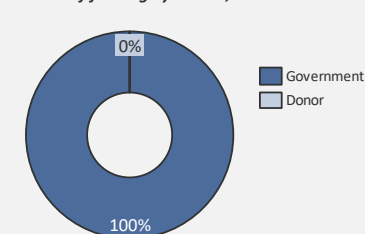
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



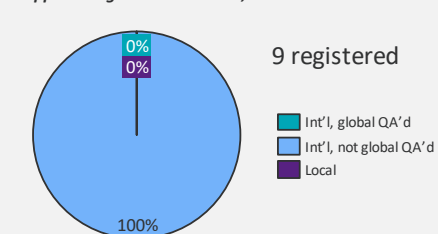
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Caffeine citrate 10mg/ml

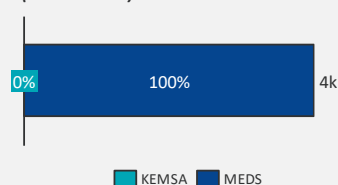
Market status: Established, low demand



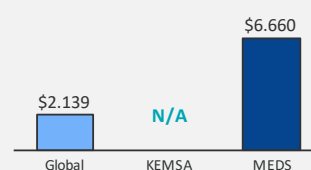
### Healthy Market Characteristics

Availability in public facilities	62% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Unclear given inconsistently included in quantification exercises
Procured volumes are sufficient to meet demand	✗ Unclear given inconsistently included in quantification exercises ✗ Not reported as procured by KEMSA 2019-2023
Supply base can meet demand	✓
Products in market are quality-assured	✓
Prices are competitive	✗ Price in Kenya 3x higher than UNICEF

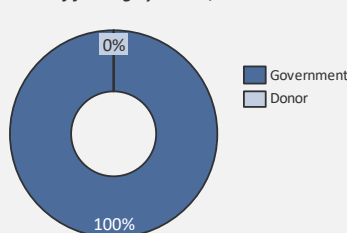
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



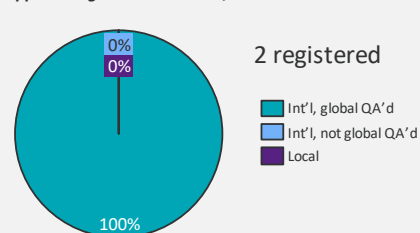
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Phytomenadione 2mg/ml, 0.2ml inj (Vitamin K1)

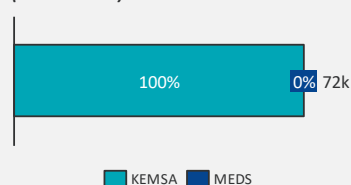
Market status: Established



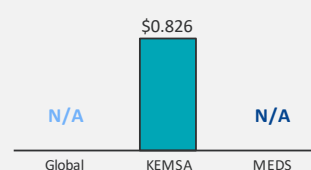
### Healthy Market Characteristics

Availability in public facilities	Not available
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Fulfilment highly variable across years, often less than quantified volume
Supply base can meet demand	✗ Insufficient number of suppliers registered to ensure supply security
Products in market are quality-assured	✗ No globally QA'd suppliers registered
Prices are competitive	Not available

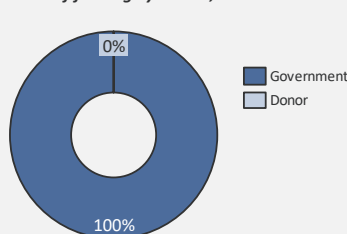
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



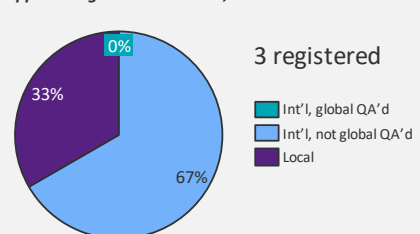
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Phytomenadione 10mg/ml, 1ml inj (Vitamin K1)

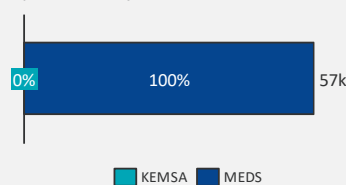
Market status: Established



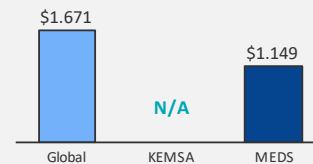
### Healthy Market Characteristics

Availability in public facilities	Not available
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Fulfilment highly variable across years, often less than quantified volume
Supply base can meet demand	✗ Insufficient number of suppliers registered to ensure supply security
Products in market are quality-assured	✗ No globally QA'd suppliers registered
Prices are competitive	✓

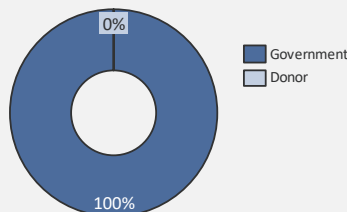
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



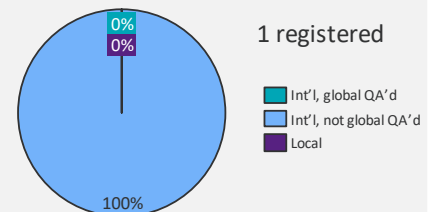
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Surfactant 100mg/ml, 10ml inj

Market status: Established, low demand



### Healthy Market Characteristics

Availability in public facilities	Not available
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Low demand
Supply base can meet demand	✗ No suppliers registered
Products in market are quality-assured	✗ No suppliers registered
Prices are competitive	Not available

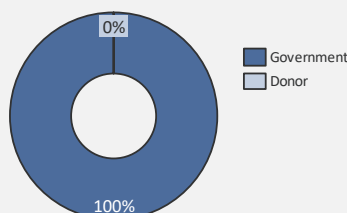
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)

No volumes reported in KEMSA or MEDS procurement volumes for public facilities, but counties reported procuring small volumes—on average 23 units per year across 16 counties

Weighted average procurement price per smallest unit, 2019-2023 (USD)

No price reported in KEMSA or MEDS procurement data for public facilities, but counties reported paying on average \$183.5 per unit

Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024

None reported as registered

Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF / UNFPA supply catalogues, and PPB registration data.

## Tetracycline 1% eye ointment

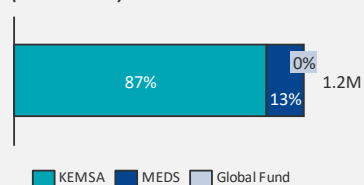
Market status: Established



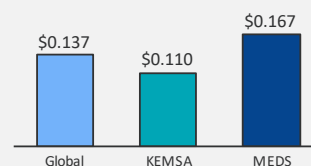
### Healthy Market Characteristics

Availability in public facilities	Not available
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Unclear given inconsistently included in quantification exercises
Procured volumes are sufficient to meet demand	✗ Unclear given inconsistently included in quantification exercises
Supply base can meet demand	✗ Insufficient number of suppliers to ensure supply security
Products in market are quality-assured	✗ No QA'd products procured + price concerns (see below)
Prices are competitive	✗ Price is highly variable across procurers; low price at KEMSA may indicate poor quality

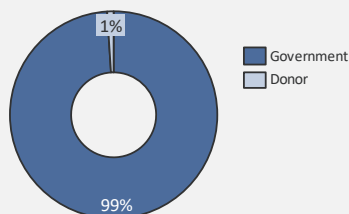
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



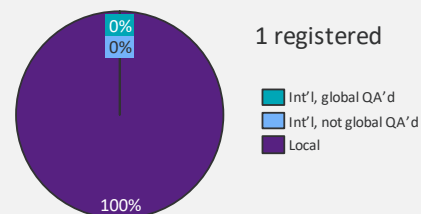
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/ UNFPA supply catalogues, and PPB registration data.



## Maternal Health

### Azithromycin 250mg cap/tab

**Market status:** Established in market, but proposed new MNCH-N use-case



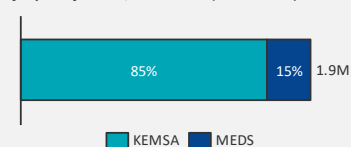
#### Healthy Market Characteristics

Availability in public facilities	49% (2018)
Products are adopted in normative guidance	✗ In EML, but not adopted for new MNCH-N use
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient and highly variable.
Procured volumes are sufficient to meet demand	✗ Variable volumes, but always less than quantified volumes. KEMSA did not procure from 2020-2023.
Supply base can meet demand	✓
Products in market are quality-assured	✓
Prices are competitive	✗ KEMSA prices are 4x higher than global prices

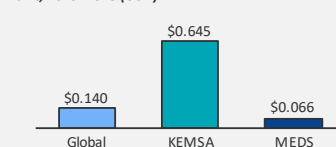
**Emerging use case:** clinical studies show promising health outcomes when used as a prophylaxis for maternal sepsis. In high-income countries, it is regularly used as a single dose in women undergoing cesarean delivery to prevent sepsis. Findings from a placebo-controlled, randomized control trial of nearly 30,000 deliveries across seven LMICs found that those receiving azithromycin 2g capsules/tablets prior to vaginal deliveries had a significantly lower risk of maternal sepsis or death compared to those in the placebo group. (Tita, Alan T.N. 2023)  
 \*Note, azithromycin 2g capsules/tablets is not currently produced in the global market. A clinician would need to administer either eight 250mg capsules/tablets or four 500mg.

\*\*Note, there is no current WHO recommendation for this use -case.

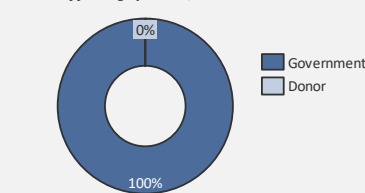
**Average annual volume procured by KEMSA and MEDS for public facilities, 2019 -2023 (smallest unit)**



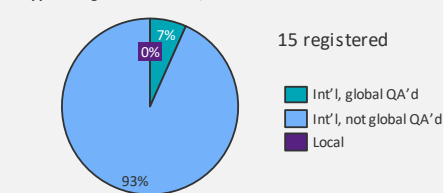
**Weighted average procurement price per smallest unit, 2019-2023 (USD)**



**Portion of funding by source, 2019 -2023**



**Suppliers registered with PPB, 2024**



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/ UNFPA supply catalogues, and PPB registration data.

### Azithromycin 500mg cap/tab

**Market status:** Established in market, but proposed new MNCH-N use-case



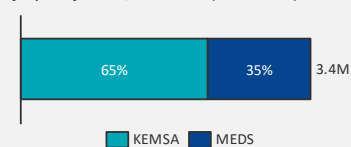
#### Healthy Market Characteristics

Availability in public facilities	49% (2018)
Products are adopted in normative guidance	✗ In EML, but not adopted for new MNCH-N use
Financing is sufficient, coordinated and reliable	✗ Majority of funding from Global Fund for HIV program
Procured volumes are sufficient to meet demand	✗ Variable volumes across years
Supply base can meet demand	Highly saturated market with +70 suppliers registered for the 500mg strength
Products in market are quality-assured	Globally QA'd procured-product was a direct donation
Prices are competitive	Country prices at least 6x cheaper than global price, but suspect received supplier/donor subsidized price

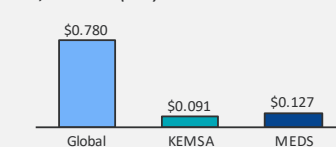
**Emerging use case:** clinical studies show promising health outcomes when used as a prophylaxis for maternal sepsis. In high-income countries, it is regularly used as a single dose in women undergoing cesarean delivery to prevent sepsis. Findings from a placebo-controlled, randomized control trial of nearly 30,000 deliveries across seven LMICs found that those receiving azithromycin 2g capsules/tablets prior to vaginal deliveries had a significantly lower risk of maternal sepsis or death compared to those in the placebo group. (Tita, Alan T.N. 2023)  
 \*Note, azithromycin 2g capsules/tablets is not currently produced in the global market. A clinician would need to administer either eight 250mg capsules/tablets or four 500mg.

\*\*Note, there is no current WHO recommendation for this use -case.

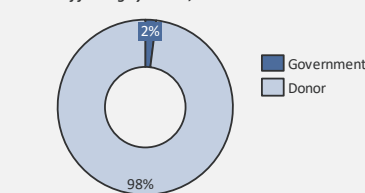
**Average annual volume procured by KEMSA and MEDS for public facilities, 2019 -2023 (smallest unit)**



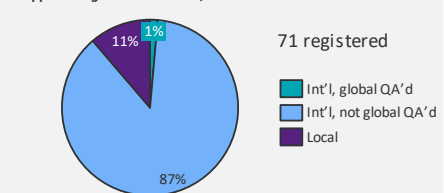
**Weighted average procurement price per smallest unit, 2019-2023 (USD)**



**Portion of funding by source, 2019 -2023**



**Suppliers registered with PPB, 2024**



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/ UNFPA supply catalogues, and PPB registration data.

## Calibrated Drape

Market status: Emerging product, local research & pilot in country



### Product Introduction Pathway

Global recommendation	✓
Local research and pilot	✓
Adoption in national guidelines	✗ Not included in relevant normative guidance



Product is financed, procured, and has an established supply base of good quality and affordable price.	✗
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### Emerging Use Case

The E-MOTIVE study found evidence of improving maternal outcomes through implementation of a 'PPH bundle' of products, which included the use of calibrated drapes for measuring blood loss. In the study, calibrated drapes with a trigger line indicating when blood loss has reached the level of signifying PPH. The study found that using these calibrated drapes helped in early detection of PPH by providing a visual cue for healthcare providers to initiate treatment and management protocols.

*WHO recommendations on the assessment of postpartum blood loss and use of a treatment bundle for postpartum haemorrhage, 2023*

"For all women giving birth, routine objective measurement of postpartum blood loss is recommended to improve the detection and prompt treatment of postpartum haemorrhage. Methods to objectively quantify blood loss, such as calibrated drapes for women having vaginal birth, can achieve this."

### Identified Market Concerns

- ✗ Expensive when compared to current practices of not using a drape. Globally, calibrated drapes range from USD \$1 - \$2 per drape.
- ✗ Determination of whether disposable or reusable drape will be procured will have implications on supply chain integration and clinical training – particularly to ensure proper sanitation.
- ✗ Desire for local manufacturing of calibrated drapes.
- ✗ Awareness generation and clinical training required to ensure demand.

Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Folic acid 5mg tab

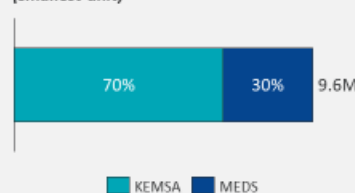
Market status: Established



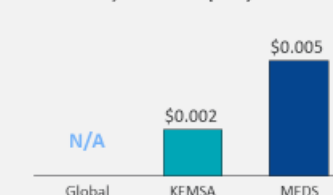
### Healthy Market Characteristics

Availability in public facilities	77% (2018)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient reliable
Procured volumes are sufficient to meet demand	✗ Decreasing volumes across years, never fulfilling quantified volumes.
Supply base can meet demand	✓
Products in market are quality-assured	✗ No globally QA'd products procured
Prices are competitive	✓

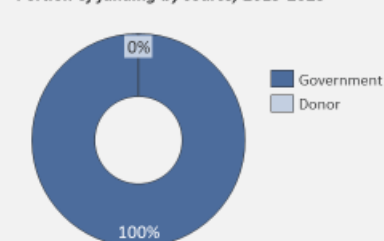
*Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)*



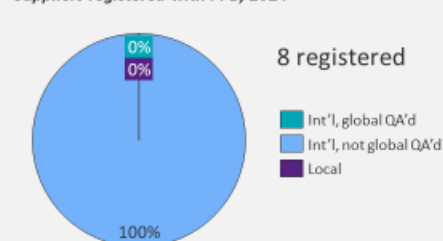
*Weighted average procurement price per smallest unit, 2019-2023 (USD)*



*Portion of funding by source, 2019-2023*



*Suppliers registered with PPB, 2024*



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Ferrous sulphate 200mg tab

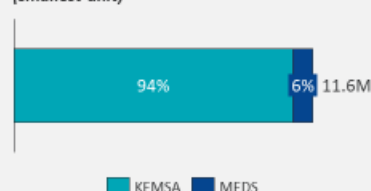
Market status: Established



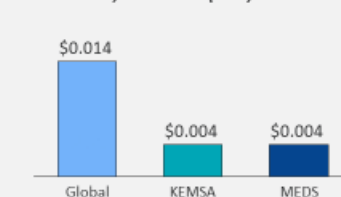
### Healthy Market Characteristics

Availability in public facilities	79% (2018)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient reliable
Procured volumes are sufficient to meet demand	✗ Variable volumes that shift closely in alignment with quantified need.
Supply base can meet demand	✓
Products in market are quality-assured	✗ No globally QA'd products procured
Prices are competitive	✓

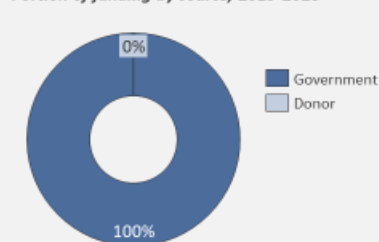
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



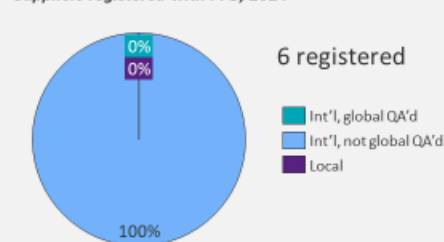
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## IFA 200mg + 0.4mg tab

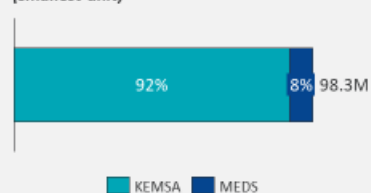
Market status: Established



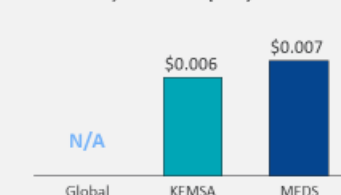
### Healthy Market Characteristics

Availability in public facilities	65% (2018)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient reliable
Procured volumes are sufficient to meet demand	✗ Variable volumes; MEDS is nearly always procuring less than quantified volumes.
Supply base can meet demand	✗ Insufficient number of suppliers registered to ensure supply security
Products in market are quality-assured	✗ No globally QA'd products registered
Prices are competitive	✓

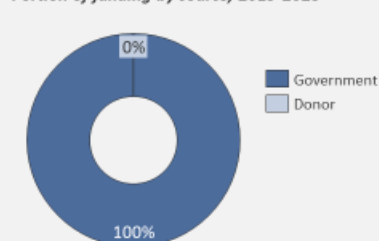
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



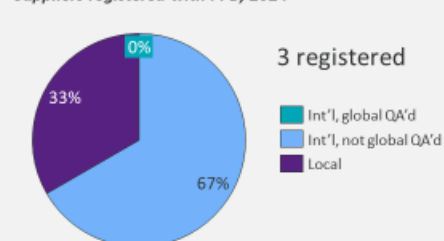
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Ferric carboxymaltose

**Market status:** Emerging product; only found in private sector



### Product Introduction Pathway

Global recommendation	✗ No WHO recommendation
Local research and pilot	✗ No local research
Adoption in national guidelines	✗ Not included in relevant normative guidance



Product is financed, procured, and has an established supply base of good quality and affordable price.	✗
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### Emerging Use Case:

Ferric Carboxymaltose (FCM) is a form of IV iron. There is increasing evidence from research studies demonstrating the efficacy of FCM when used during the second and third trimester as safe and resulting in significantly lower anemia and iron deficiency compared to oral iron supplements. (Afolabi, 2022) (Pasricha, 2025). Compared to iron sucrose – another form of IV iron currently available in the Kenyan market – FCM offers simplified administration because it only requires a single dose to have the same effect as multiple doses of iron sucrose over a discreet period.

The WHO has not formally endorsed use of FCM in severe anemia for pregnant women in its “Guideline: Daily iron supplementation in adult women and adolescent girls”(WHO 2016).

### Identified Market Concerns

- ✗ Affordability of FCM is a key barrier to market access in low resource settings. In other countries, the cost of FCM ranges from USD \$26-50 per dose.
- ✗ County Health Departments reported procuring small volumes directly from the open market, so behavior change would be required if KEMSA and/or MEDS begin procuring.
- ✗ FCM has a limited global supplier base. It is produced by a small group of suppliers globally, including: FERINJECT by Vifor Pharma (Switzerland), Sandoz (Switzerland), and Orofer from Emcare Pharmaceuticals (India). Two suppliers are registered in Kenya.
- ✗ Awareness generation and clinical training required to ensure demand and appropriate administration.

Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Heat stable carbetocin inj

**Market status:** Emerging product; being scaled up



### Product Introduction Pathway

Global recommendation	✓
Local research and pilot	✓
Adoption in national guidelines	✓



Product is financed, procured, and has an established supply base of good quality and affordable price.	Not reported as procured by KEMSA or MEDS during the 2019-2023 period. KEMSA signed an agreement with Ferring in 2024 to procure in the future.
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### Emerging Use Case

The E-MOTIVE study found evidence of improving maternal outcomes through implementation of a ‘PPH bundle’ of products, which included the use of heat stable carbetocin to prevent PPH.

WHO recommends HSC for prevention of PPH if Oxytocin is unavailable or the quality cannot be guaranteed, and so long as its cost is comparable to other uterotonics

*WHO recommendation: Uterotonics for the prevention of postpartum hemorrhage, 2021*

Administration	Recommendation
IV	Sustained uterine contractions within 2 minutes, lasting for about 6 minutes and followed by rhythmic contractions for 60 minutes
IM	Sustained uterine contractions lasting for about 11 minutes and rhythmic contractions for 120 minutes

### Identified Market Concerns

- ✗ Ferring has agreed to sell to public sector procurers in low-resource settings at an ex-factory price of USD \$0.31 per unit, which is still expensive when compared to other uterotonics.
- ✗ Marketed in private sector (Pabal)
- ✗ Ferring is the single supplier on the global market, holding the patent until 2032.
- ✗ Awareness generation and clinical training required to ensure demand and appropriate use within the bundle of PPH prevention and treatment products.

Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Magnesium sulphate 50%, 10ml ampule

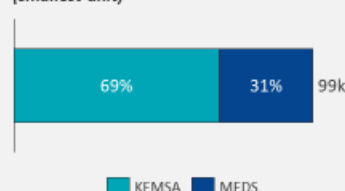
Market status: Established



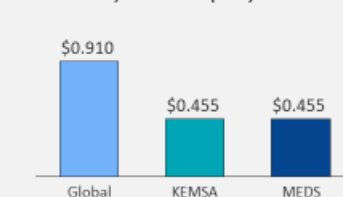
### Healthy Market Characteristics

Availability in public facilities	55% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Variable volumes; KEMSA consistently procuring lower than quantified volumes
Supply base can meet demand	✓
Products in market are quality-assured	✗ No globally QA'd products procured + price concerns (see below)
Prices are competitive	Prices are half the cost of global prices, and the lowest of countries studied. This indicates a potential quality concern.

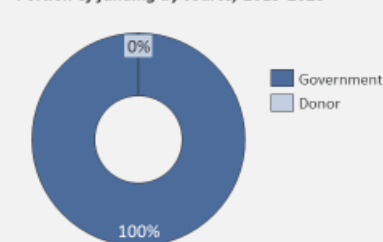
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



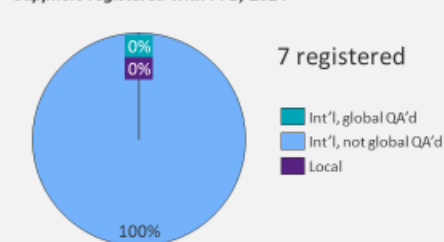
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Misoprostol 200mcg tab

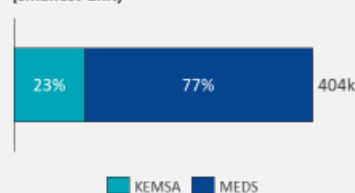
Market status: Established



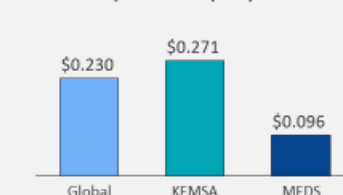
### Healthy Market Characteristics

Availability in public facilities	15% (2018)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ GOK driven but insufficient
Procured volumes are sufficient to meet demand	✗ KEMSA did not procure 2021-2023. Counties procured through MEDS or open market
Supply base can meet demand	✓
Products in market are quality-assured	✓
Prices are competitive	✗ KEMSA price 2x higher than MEDS ✗ Prices are highly variable across years

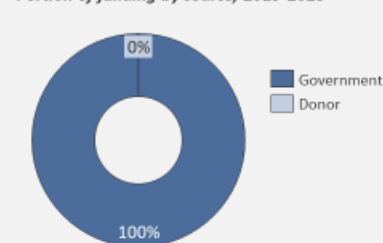
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



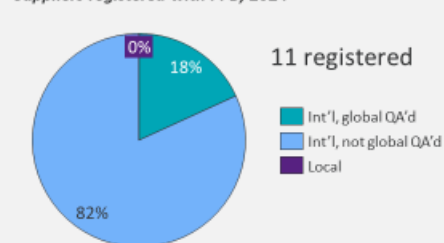
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.

## Multiple Micronutrient Supplement (UNIMMAP)

Market status: Emerging product, local research & pilot in country



### Product Introduction Pathway

Global recommendation	✗ No WHO recommendation
Local research and pilot	✓
Adoption in national guidelines	✗ Not included in relevant normative guidance



Product is financed, procured, and has an established supply base of good quality and affordable price.	Not reported as procured by KEMSA or MEDS during the 2019-2023 period; however, MMS is being procured and introduced by partner-funded efforts in specific counties, such as by the Catholic Medical Mission Board (CMMB).
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### Emerging Use Case

There is clear and consistent evidence from clinical trials that MMS provides additional benefits over only IFA supplements in reducing adverse pregnancy outcomes. Despite its higher cost, preliminary studies show the product remains cost-effective. (Alfiani, 2025).

Compared to IFA alone, MMS can:

- Reduce the number of infants born with low birthweight by 12-14%
- Reduce preterm births by 6 to 8%
- Reduce the number of small for gestational age newborn infants by 2 to 9%
- Reduce the number of stillbirths by 8%.
- In anemic or underweight pregnant women, the benefits of MMS over IFA are even greater. For example, in anemic pregnant women, MMS reduces low birthweight by 19% and 6-month infant mortality by 29%.

### Identified Market Concerns

- ✗ Expensive when compared to IFA.
- ✗ Quality control is difficult given various formulations of iron supplements with micronutrients in the market, making it difficult to isolate the UNIMMAP formulation.
- ✗ Awareness generation and clinical training required to ensure demand and appropriate use compared to other supplements to treat anemia.

## Oxytocin 10iu/ml, 1ml ampule

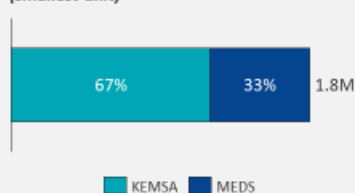
Market status: Established



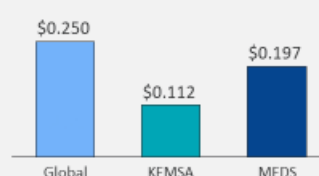
### Healthy Market Characteristics

Availability in public facilities	62% (2023)
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	✗ Variable volumes across years ✗ Neither KEMSA nor MEDS procured volumes align with quantifications
Supply base can meet demand	✓
Products in market are quality-assured	✗ No globally QA'd products registered or procured
Prices are competitive	✓

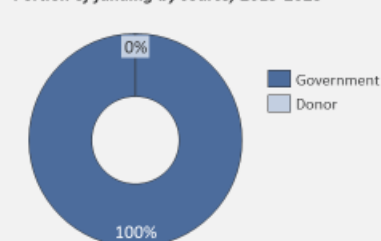
Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



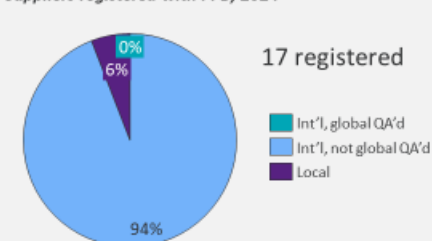
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



## Tranexamic acid 100mg/ml, 10ml inj

Market status: Established in market, but proposed new MNCH-N use-case

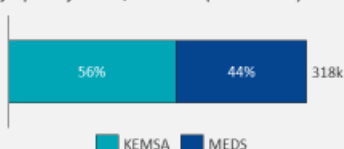


### Healthy Market Characteristics

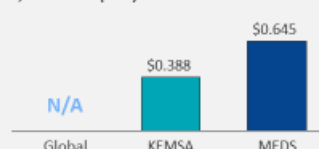
Availability in public facilities	Not available
Products are adopted in normative guidance	✓
Financing is sufficient, coordinated and reliable	✗ Gov't driven but insufficient
Procured volumes are sufficient to meet demand	Current procured volumes satisfy quantified demand, but will need to increase to reflect the new PPH use-case
Supply base can meet demand	✗ Only 3 registered suppliers limits supply security
Products in market are quality-assured	✗ No globally QA'd products procured + price concerns (see below)
Prices are competitive	✗ Significant price differential across procurers

**Emerging use case:** WHO updated its recommendations for the prevention and treatment of PPH to include use of TXA for treatment of all PPH, regardless of whether the bleeding is due to genital tract trauma or other causes. (WHO, 2017). This is an update from the 2012 WHO recommendation for TXA to be used only if other uterotonics – such as oxytocin – fail to stop hemorrhaging and only when PPH is caused by trauma.

Average annual volume procured by KEMSA and MEDS for public facilities, 2019-2023 (smallest unit)



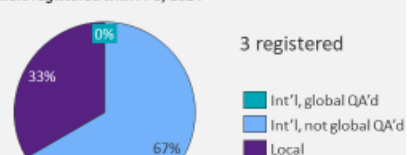
Weighted average procurement price per smallest unit, 2019-2023 (USD)



Portion of funding by source, 2019-2023



Suppliers registered with PPB, 2024



Sourced from Kenya Health Facility Census (2023), Kenya EML and clinical guidelines, KEMSA and MEDS procurement data, UNICEF/UNFPA supply catalogues, and PPB registration data.



## Works Cited

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<sup>1</sup> UNICEF, [“Under-five mortality”](#), January 2023.

<sup>2</sup> WHO, [“A woman dies every two minutes due to pregnancy or childbirth: UN agencies”](#), February 2023.

<sup>3</sup> Maternal mortality rate sourced from Kenya Census 2019. Under-five and newborn mortality rates sourced from Kenya DHS 2022.

<sup>4</sup> Maisha Meds source point of sales data from the Maisha Meds network of +1,250 facilities and retail outlets in Kenya. Product sales data was collected and analyzed from 2023, and a projected total market annual sales size was estimated across the ~18,800 private health facilities in Kenya. This data was not available for all priority MNCH-N products included in the assessment.

<sup>5</sup> Maisha Meds sourced export data from India, Indonesia, Hungary and – to some degree – from Bangladesh to Kenya using a third-party provider. The average annual market size per product was then estimated as the annual average volume exported to Kenya between 2018-2024. This data was not available for all priority MNCH-N products included in the assessment.

<sup>6</sup> Procurement volumes were sourced from KEMSA and MEDS across 2019-2023. Annual average procurement volumes were calculated for each product.

<sup>7</sup> Kenya DHS 2022.

<sup>8</sup> Procurement data from KEMSA and MEDS indicated the funding source and value across 2019-2023.

<sup>9</sup> Procurement data shared by counties indicated the volume and value per product from 2021-2023.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> 12 of the 16 counties reported quantified volumes. These were compared to the reported procured volumes for that year.

<sup>13</sup> Analysis completed by Maisha Meds. Data was sourced from a third-party provider for export and wholesale prices, and retail prices were reported from the Maisha Meds network of facilities and retailers in Kenya. Products analyzed included: amoxicillin DT/OS, azithromycin capsule/tablet, dexamethasone injection, ferric carboxymaltose injection, IFA, folic acid tablet, gentamicin injection, magnesium sulphate injection, misoprostol tablet, oxytocin injection, and tranexamic acid injection.

<sup>14</sup> Ibid.

<sup>15</sup> Point of sales data sourced by Maisha Meds from their network of +1,250 private facilities in Kenya from 2019-2023. Brands reported as sold were reconciled with suppliers listed at registered on the PPB portal in 2024.

<sup>16</sup> Weighted average procurement prices were calculated by dividing total volume procured by central procurers by their total spend across 2019-2023, per product. Data sources included UNICEF and UNFPA price catalogs for global prices, and the central procurers in Ethiopia, Kenya, and 10 Nigerian states. MNCH-N products were not included in this analysis if they were not procured across all three countries or if they were not included on UNICEF/UNFPA price catalogs.

<sup>17</sup> County procurement data included procurement price. The weighted average procurement prices were calculated by dividing the total volume procured by counties by their total spend across 2021-2023, per product.

<sup>18</sup> KEMSA and MEDS reported procurement prices for each MNCH-N product. Weighted average procurement prices were calculated by dividing total volume procured by central procurers by their total spend across 2019-2023, per product.



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<sup>19</sup> Registered suppliers were sourced from the Kenya Pharmacy and Poison Board’s registration portal in September 2024.

<sup>20</sup> Ibid.

<sup>21</sup> Maisha Meds estimated the annual market value of locally manufactured products based on the portion of local manufactured products sold in its network of private retailers. This analysis included azithromycin, amoxicillin DT/OS, IFA, folic acid, gentamicin, and dexamethasone.

<sup>22</sup> Analysis compared the suppliers documented as being procured from by KEMSA or MEDS from 2019-2023 to R4D’s list of MNCH-N globally quality-assured suppliers (QASL). The QASL was developed by R4D by analyzing which suppliers for MNCH-N products hold approval from the WHO Pre-qualification mechanism or a Stringent Regulatory Authority.



## Acknowledgements

The MNCH-N Market Assessment was designed and implemented by Results for Development (R4D), with funding from the Gates Foundation. In Kenya, R4D partnered with Practheath Consulting and Maisha Meds.

A special thank you to the following for their engagement and support, without which this assessment would not have been possible: Kenya Ministry of Health, Kenya Pharmacy and Poisons Board, KEMSA, MEDS, Kenya Council of Governors, and County Health Departments.