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CO-CREATING INNOVATIONS FOR HEALTH

Health Procurement Africa

THINK WELL

CIPS

ARC

To Improve Supplies Availability at Facilities

Kakamega, Nakuru, Isiolo and Trans Nzoia Counties

24th August 2023

SUPPLY CHAIN LANDSCAPING: APPROACH

Focus on 3 areas:

- Health Financing - ThinkWell
- Supply forecasting and quantification- inSupply Health
- Procurement : Chartered Institute of Procurement and Supplies

SCOPE & METHOD

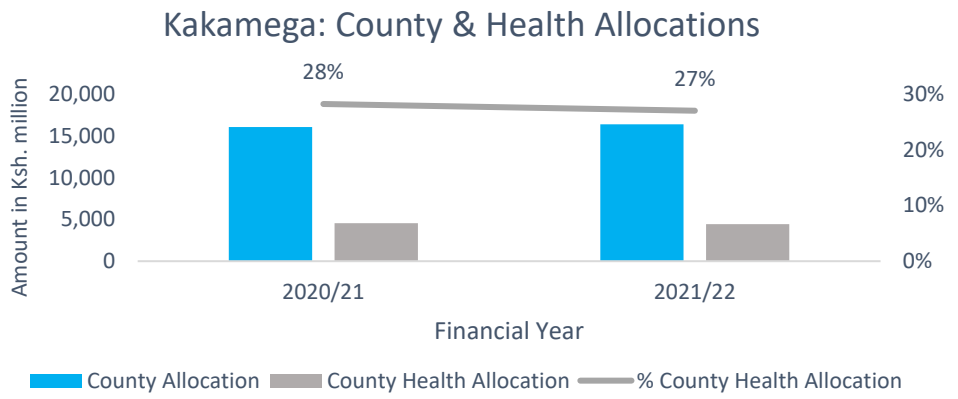
- 4 Counties: Kakamega, Isiolo; Nakuru, Trans Nzoia;
- Key informant interviews [KII] : County level & Health facility
- Desk review of financing, Forecasting & and procurement documents

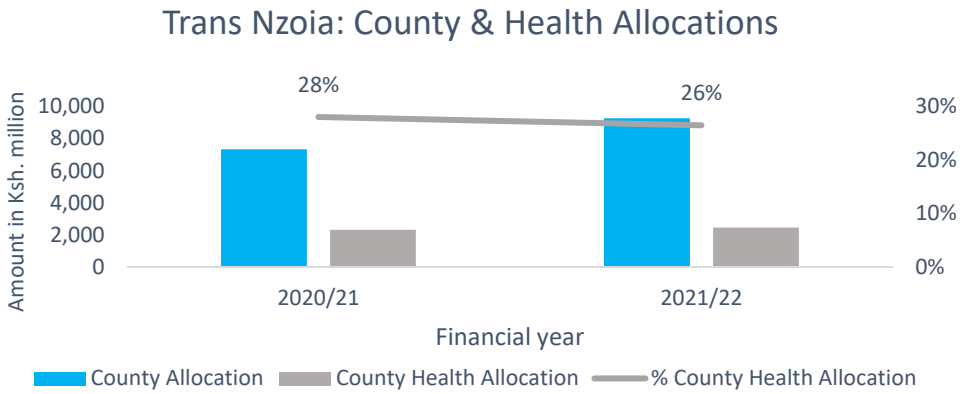
Health facilities & respondents interviewed

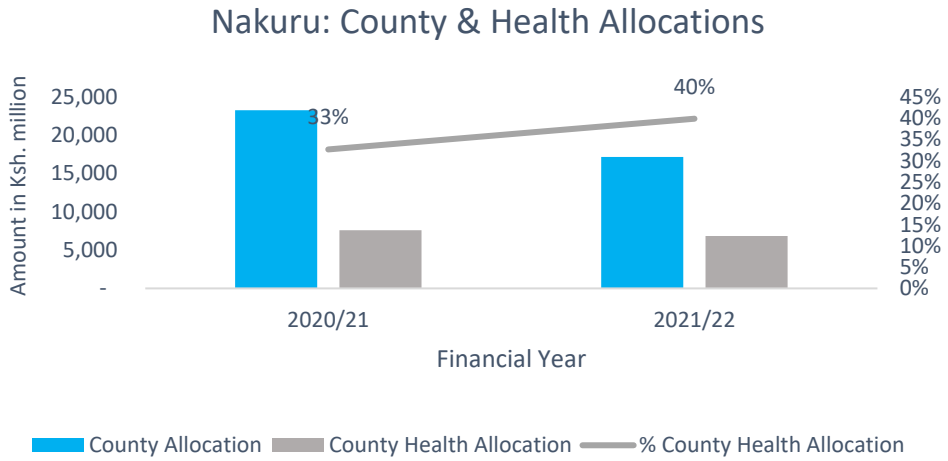
County	Kakamega	Trans Nzoia	Isiolo	Nakuru	Total
Health facilities	7	13	9	10	39
KIIs	28	33	29	41	131

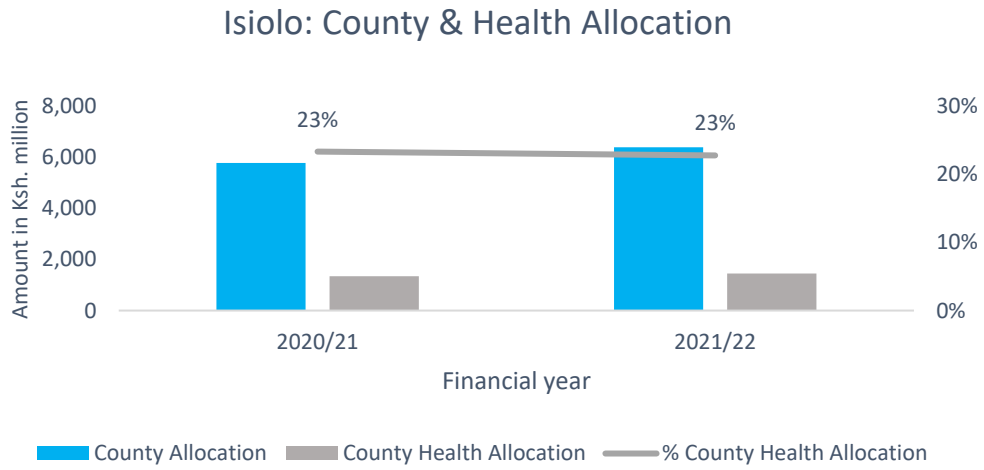
SP4PHC Strategic Purchasing for Primary Health Care

COUNTIES ALLOCATING 23-40% OF THE TOTAL BUDGET TO THE HEALTH SECTOR

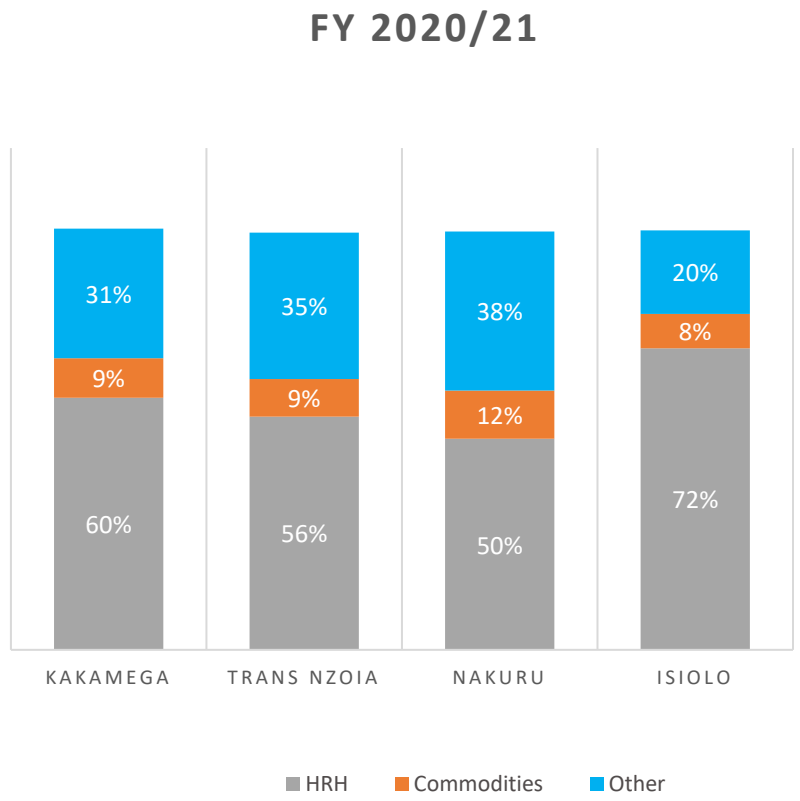


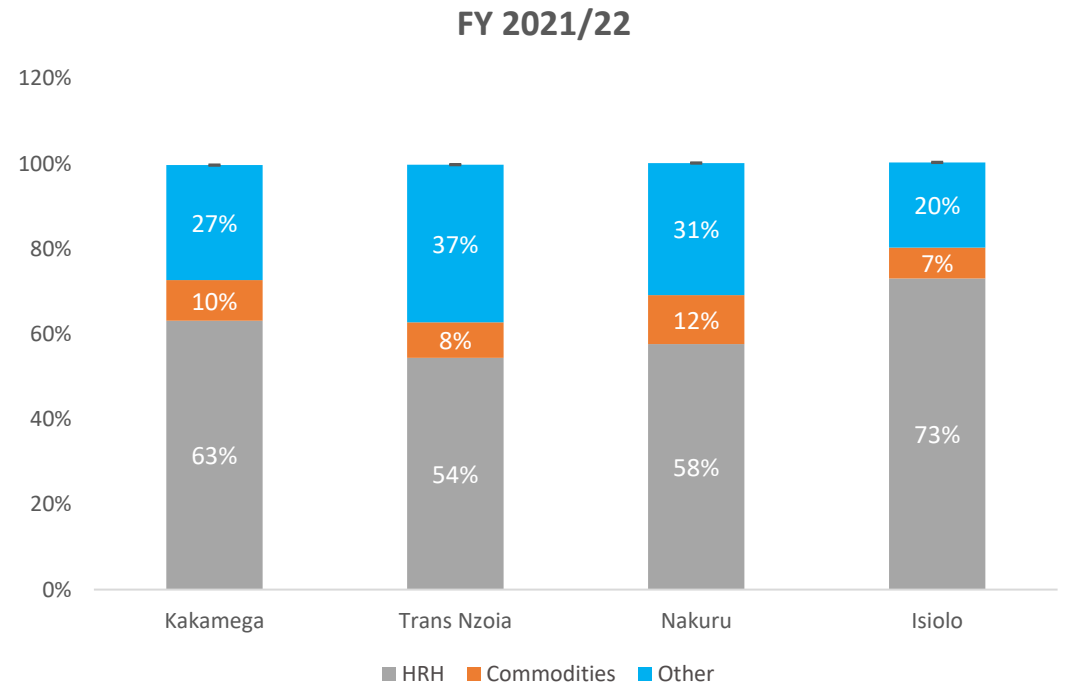






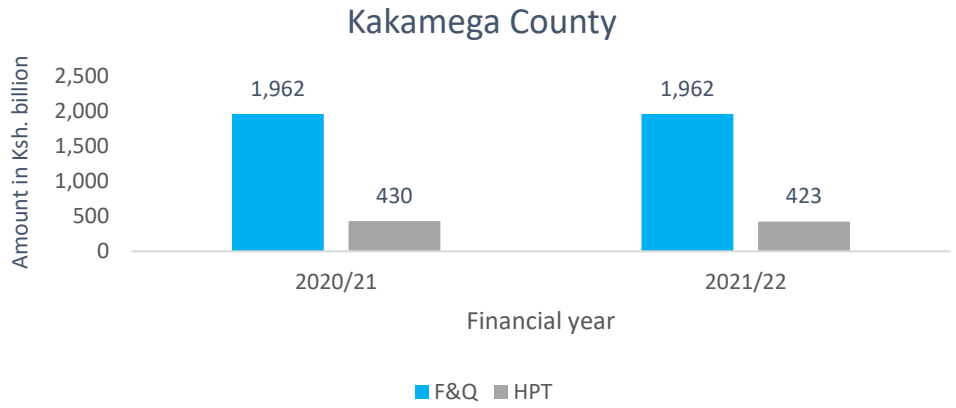
COUNTIES ARE SPENDING 7-12% OF THE HEALTH BUDGET ON HPTS.

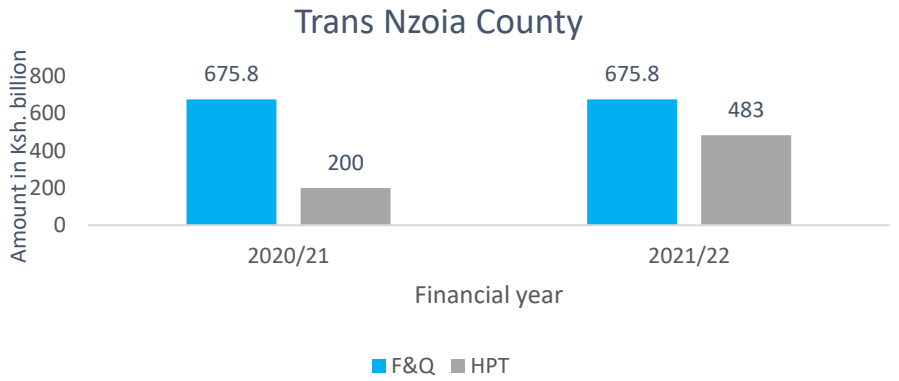


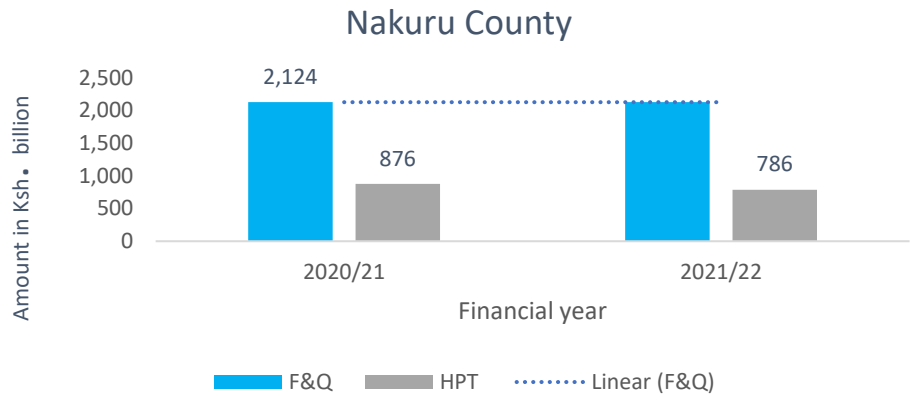


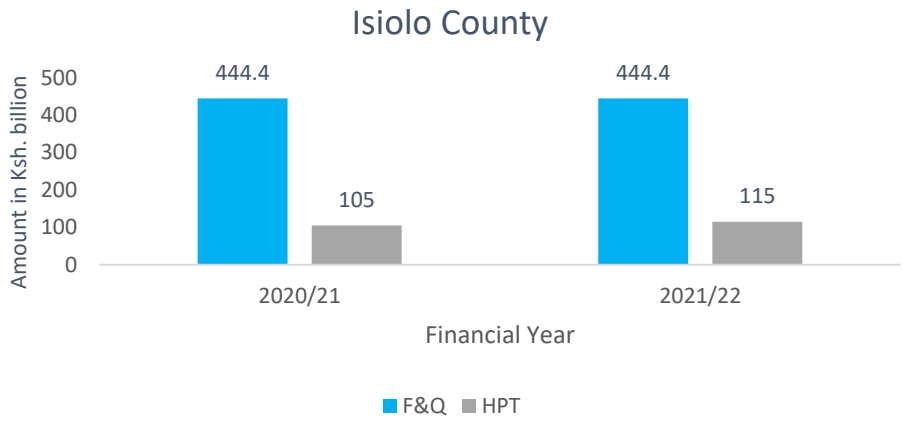
HRH gets the lions share of most of the county health budget, leaving limited fiscal space for supplies and other priorities.

FINANCIAL ALLOCATIONS FOR HPTS ARE ONLY 21% OF THE HPT NEED, LEADING TO REGULAR STOCKOUTS



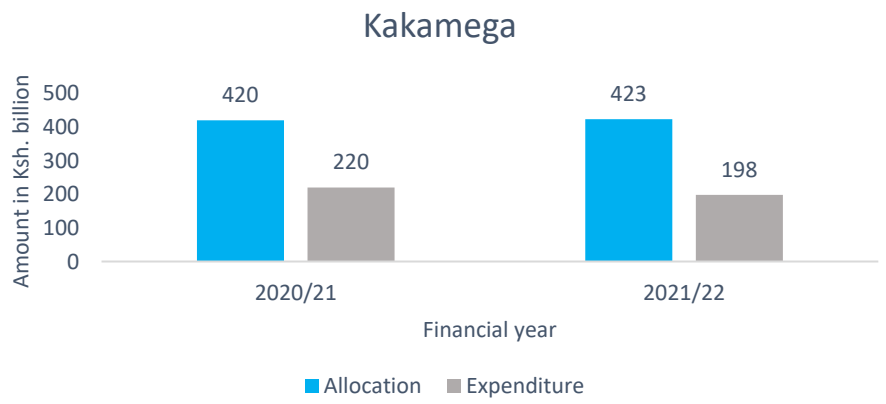


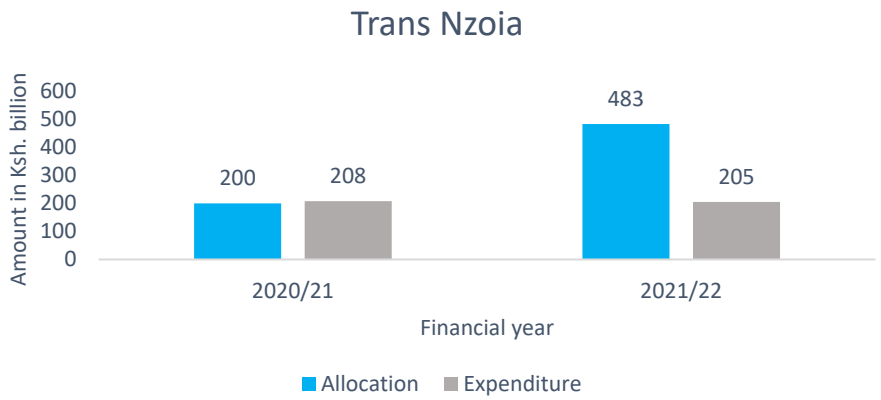


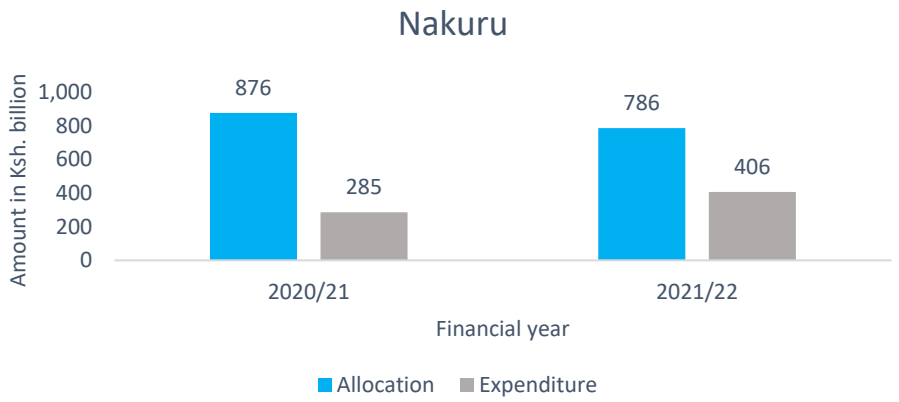


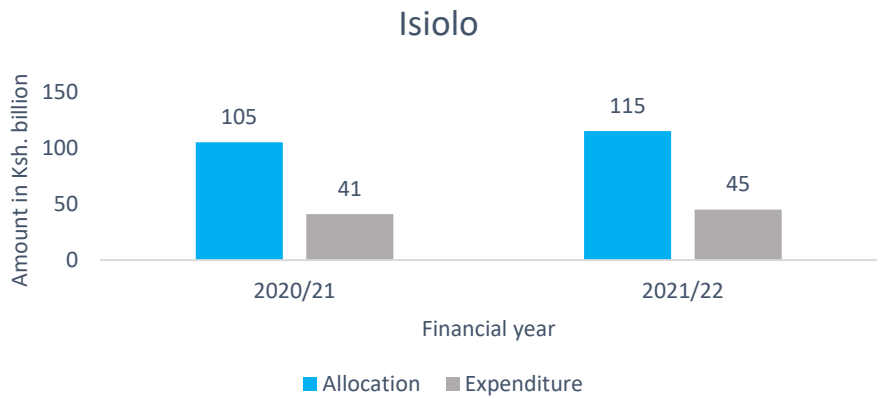
Forecasting and quantification data has limited use in determining the funding and procurement for HPTs.

DESPITE LOW HPT ALLOCATION, THE BUDGET ABSORPTION IS LESS THAN 50%.









Delays in government transfers to Counties;
Pending bills (that must be prioritized)
Misalignment between different budget products on amounts allocated for HPTs;
Delayed procurement processes (Most counties had less than 4 orders per year -Average 2)

SP4PHC
Strategic Purchasing for Primary Health Care

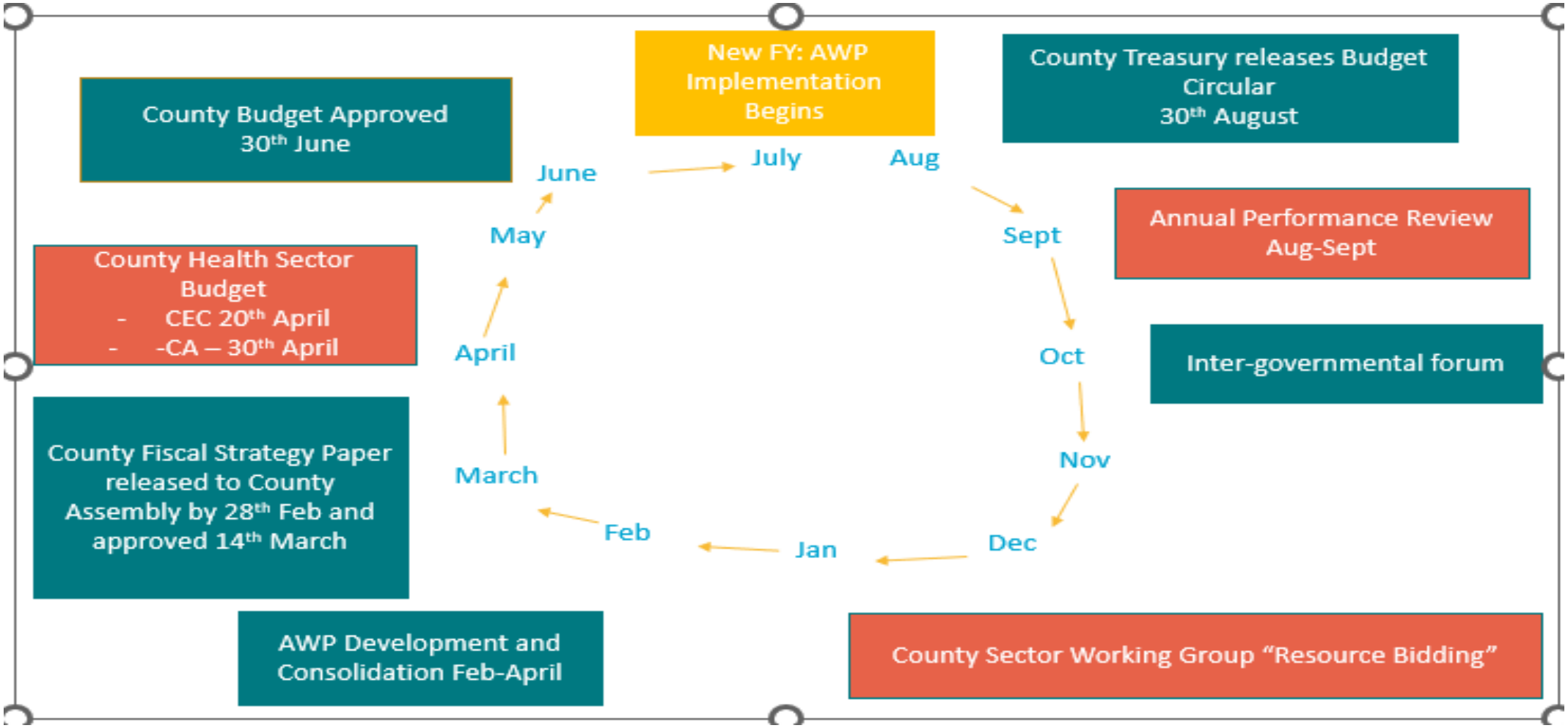
A SPOTLIGHT ON NAKURU COUNTY

Hospitals have the autonomy to use their own source revenue to procure essential medicines and supplies,

Hospitals able to make quarterly procurement hence able to reduce stock out rate

Procurement units established [Accountant, Procurement Officer] posted in each hospital to support compliance with the laws on procurement,

THE BUDGET CYCLE: PROVIDES OPPORTUNITIES TO ADDRESS GAPS IN HPT FINANCING



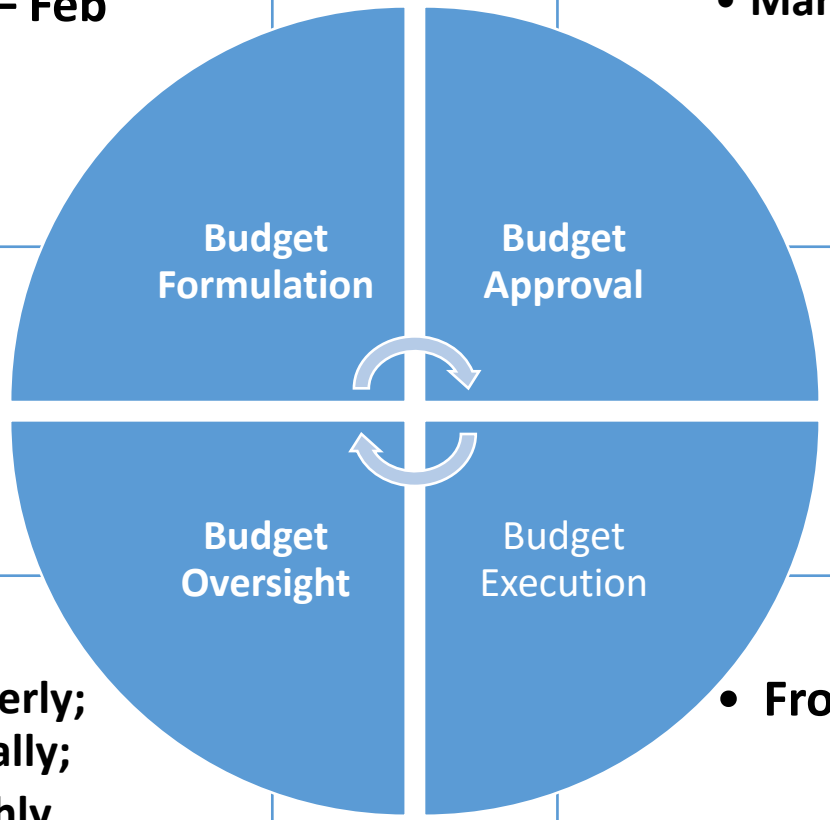
OPPORTUNITIES FOR THE INTEGRATED APPROACH WITHIN THE BUDGET CYCLE TO STRENGTHEN AVAILABILITY OF MEDICINE AT PUBLIC HEALTH FACILITIES:

Formulate data driven HPT budget based on F&Q

- **Aug – Feb**

- **Mar-June**

Defend HPT budget, Negotiate with stakeholders



Regular HPT budget and orders review

- **Quarterly; Annually;**
- **Monthly**

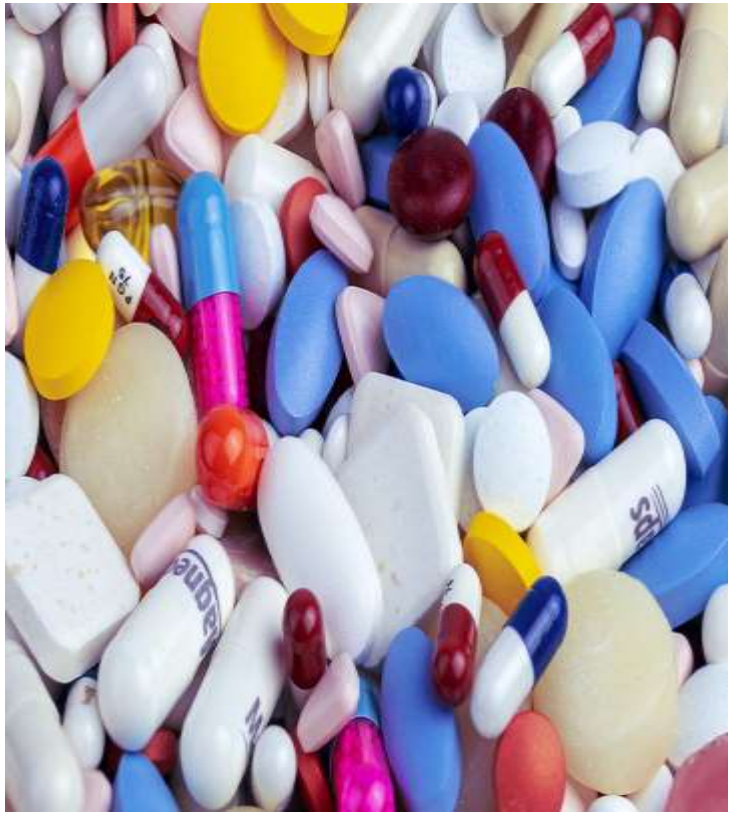
- **From July**

Timely HPT orders, Supplementary budgets infavour of HPT

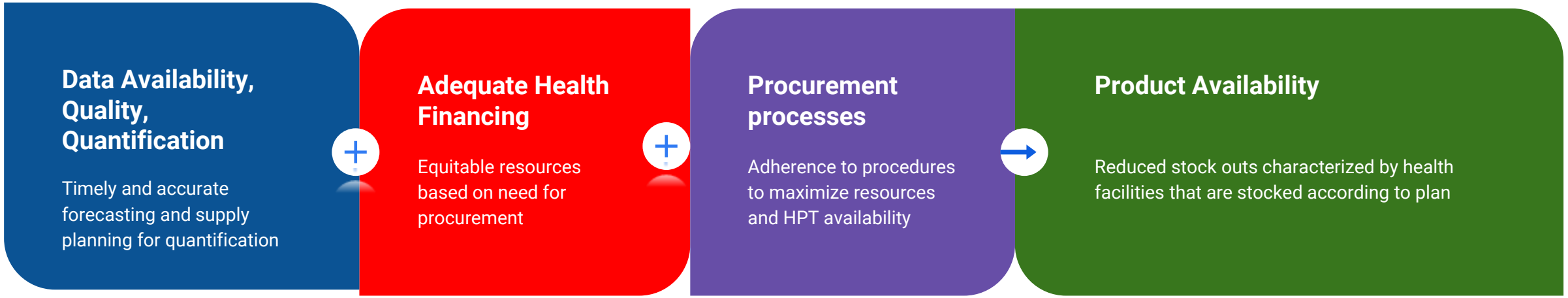
SP PHC
Strategic Purchasing for Primary Health Care

ADDITIONAL CHALLENGES

- **Delinked process** for forecasting, quantification, and budget preparation;
- **Internal PFM processes**: Delays
  - affecting the efficiency and timely availability of supplies;
  - In AIE approvals leading to spending at the source
- **Policy conflicts especially for PHC facilities cannot procure HPTs,**
- **Lack of visibility of the HPT allocation between Hospitals & and PHC facilities,**
- **Disconnect between key coverage & and health outcome indicators e.g. in MNH services**



Quantification & Financing & Procurement, when done effectively and in combination, are important drivers of product availability at the service delivery points



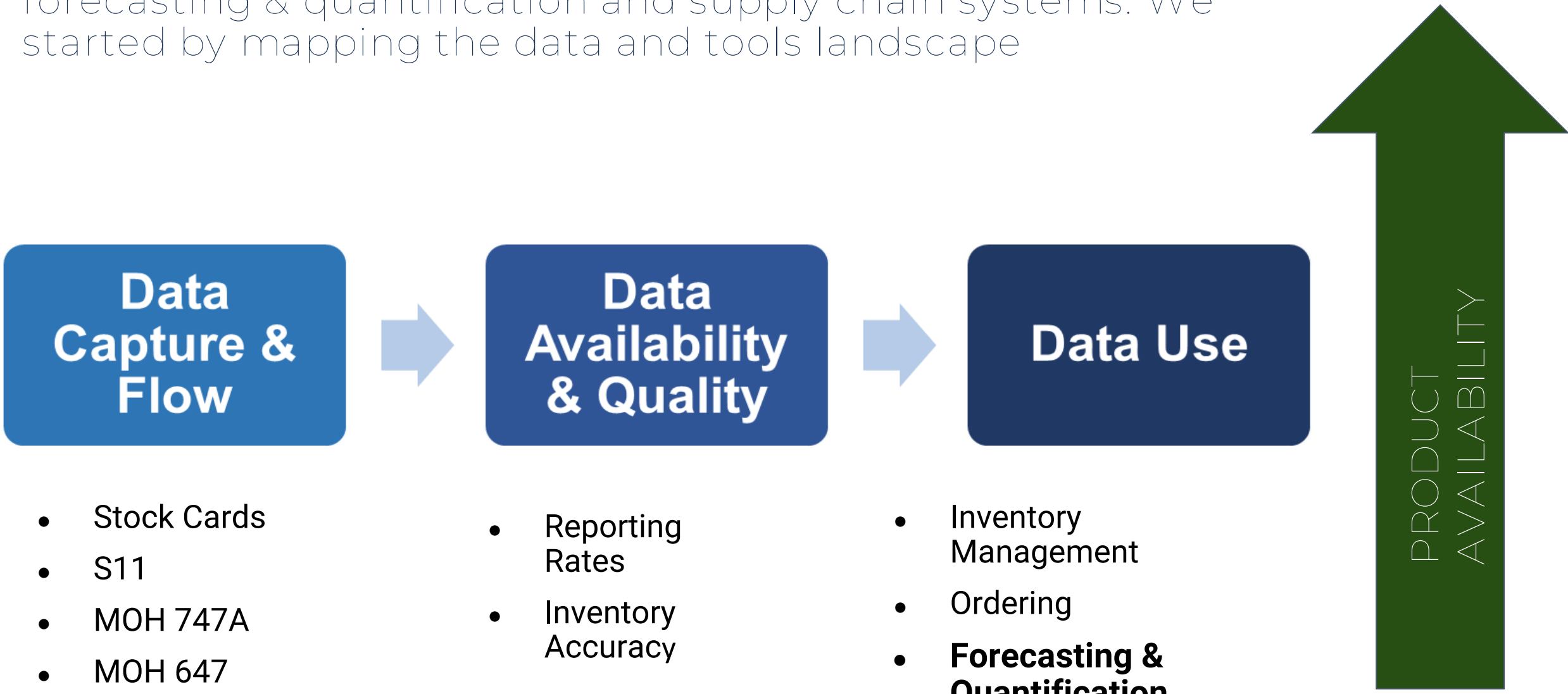
A functional supply chain relies on robust processes and procedures, competency and skills, and timely availability of quality data and use of data to maximize continuous availability of HPTs at service delivery points

Tracer RMNCH products sampled for landscaping exercise

- Based on project parameters and consultation with MOH, a shortlist of RMNCH products were sampled as tracer products
- Tracer products were **sampled purposively** for review during the landscaping exercise across 4 categories, partly based on their inclusion in MOH 647 and 747A
- Project implementation will not be limited to system strengthening for the sampled products, which will just be **use cases** based on **availability of the data** in the national health information system
- **9 products remained the same** across the counties, however some products changed from county to county as discussions were ongoing

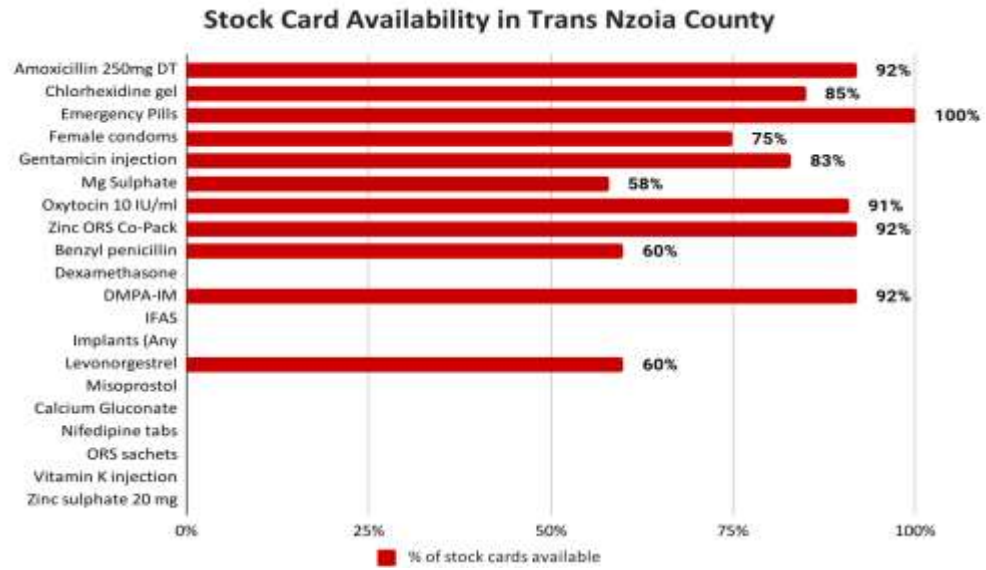
Reproductive health	**(Condition)**
• Female Condom	(contraceptive)
• Implants	(contraceptive: long-term)
• Emergency contraceptives	(contraceptive)
Maternal health	
• Oxytocin	(post-partum hemorrhage)
• Misoprostol	(post-partum hemorrhage)
• Magnesium Sulfate	(eclampsia, pre-eclampsia)
Newborn health	
• Injectable Antibiotics	(bacterial infection, sepsis)
• Antenatal Corticosteroids	(pre-term respiratory distress syndrome)
• Chlorhexidine	(newborn cord care)
• Resuscitation equipment	(newborn asphyxia)
Child health	
• Amoxicillin	(pneumonia)
• Oral Rehydration Salts (ORS)	(diarrhea)
• Zinc	(diarrhea)

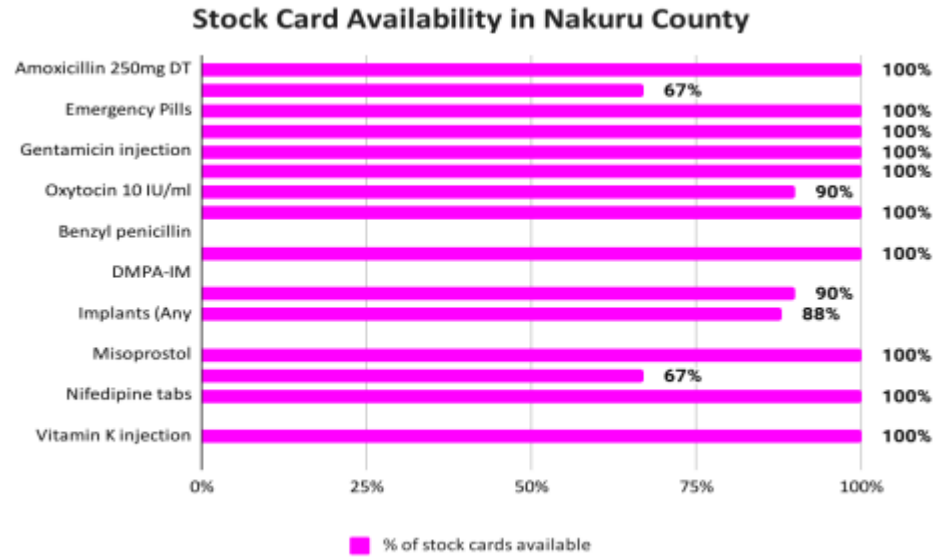
Data, tools and competencies form the backbone of robust forecasting & quantification and supply chain systems. We started by mapping the data and tools landscape

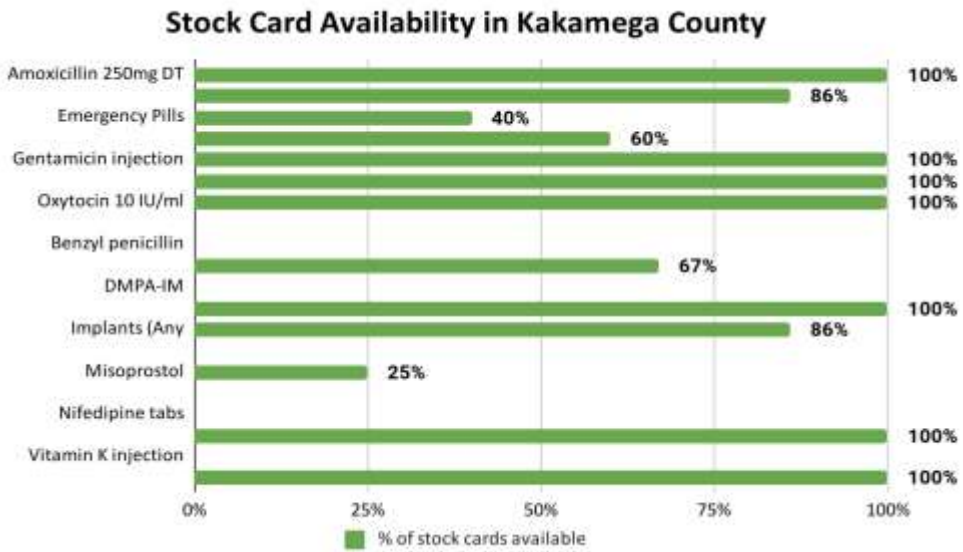


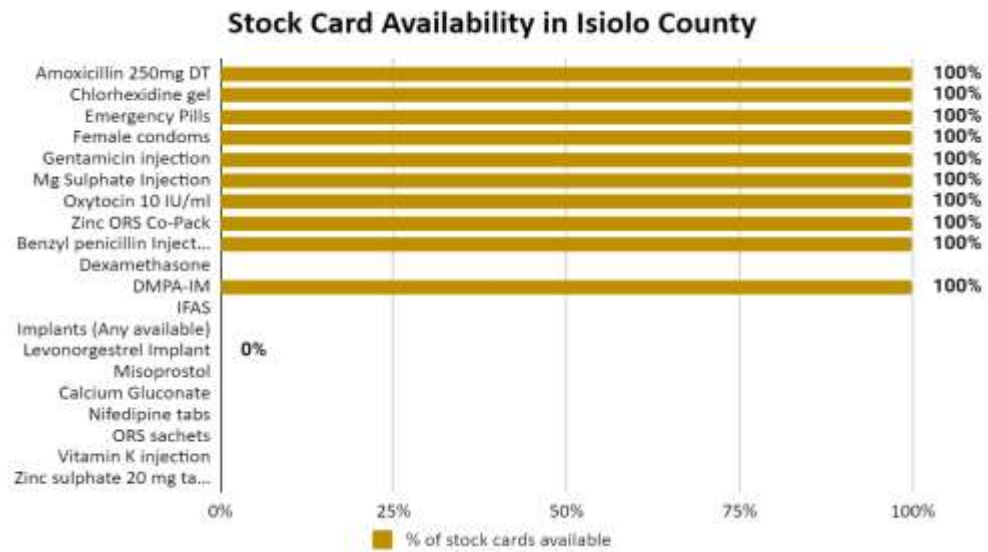
Basic tools for management were in place. Stock cards were available for most but not all of the products managed in the four counties; however stock cards were not consistently updated

Data Capture & Flow





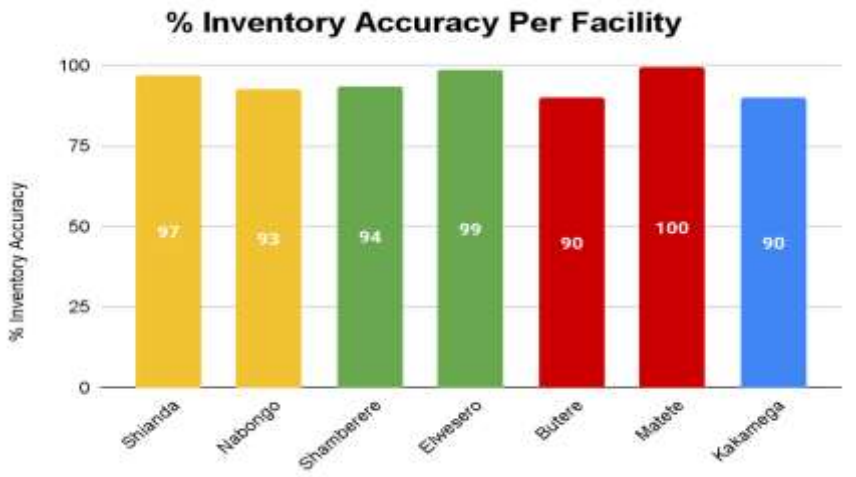




Stock card data quality was generally high, but varied widely across counties and levels of the system, likely because physical counts and stock card updates are not consistently practiced

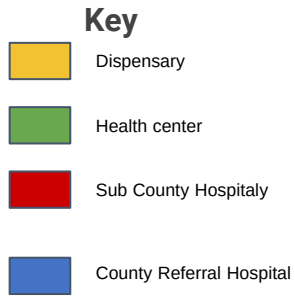
Data Availability & Quality

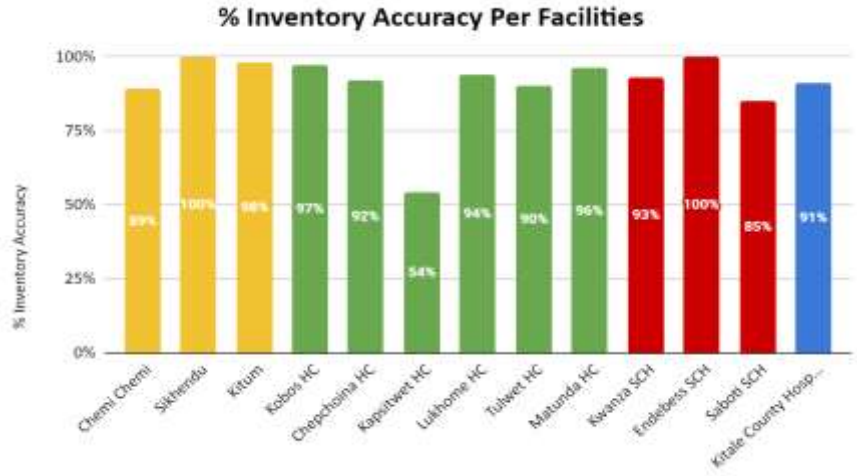
Nakuru County



Kakamega County

Isiolo County

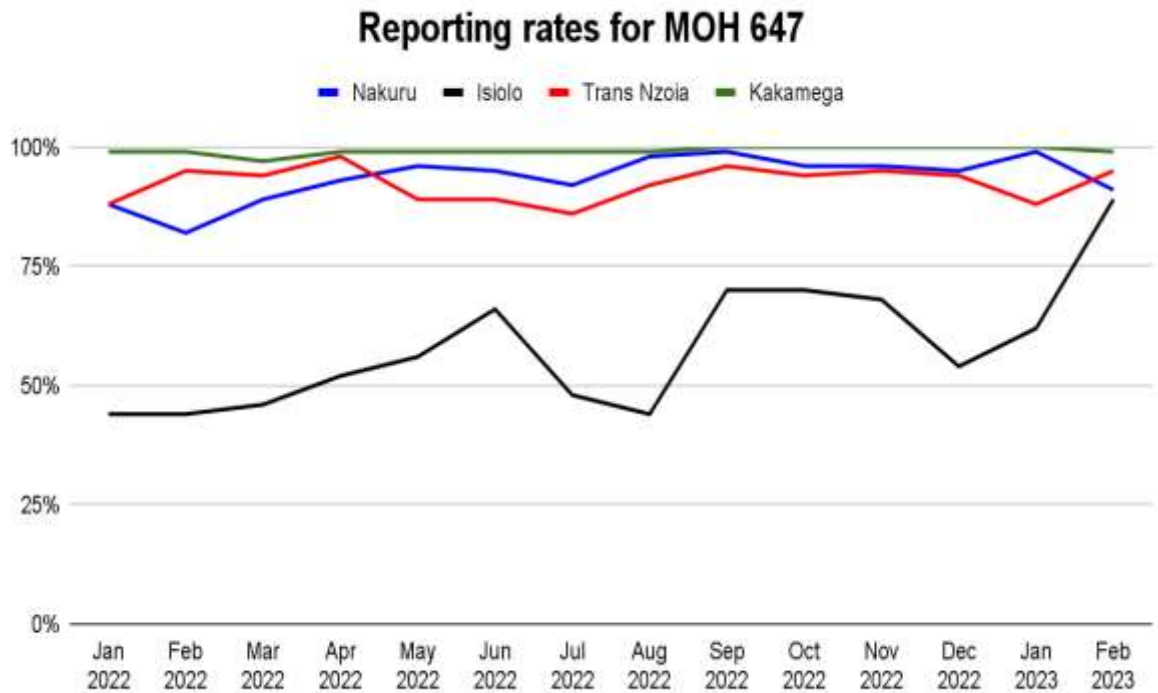


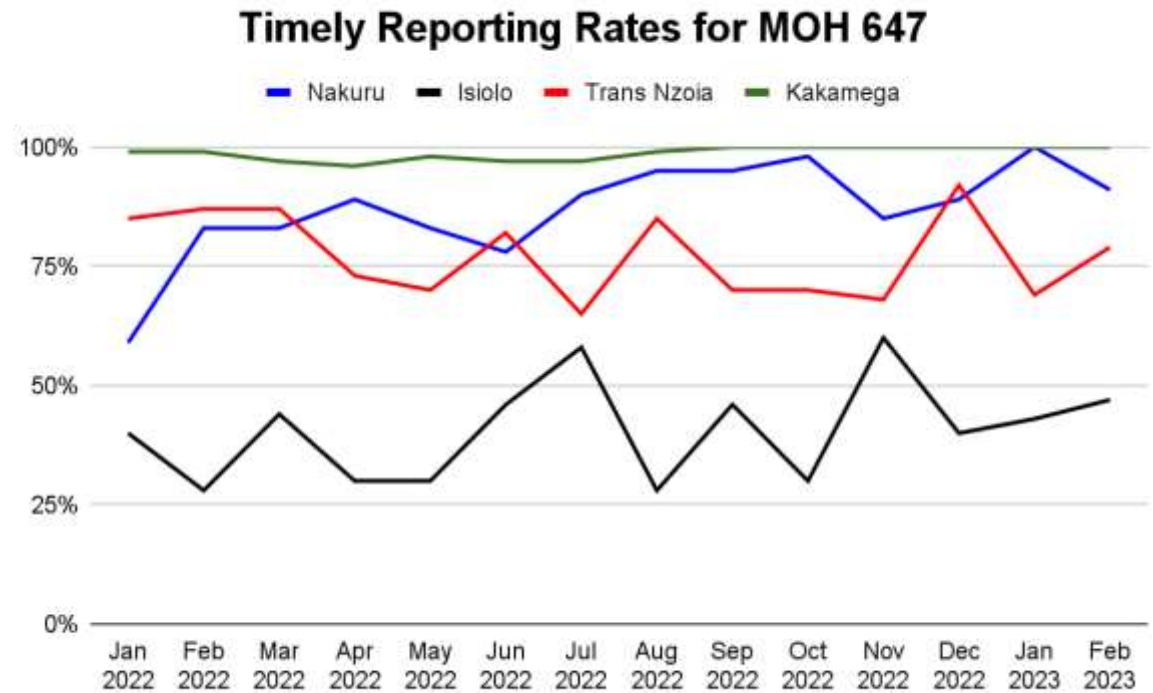


Trans Nzoia County

HPT product reporting is not as mature as FP. 3 of 4 counties have high availability and timeliness of reporting for HPTs (MOH 647); Kakamega is the only county to submit 100% reports on time

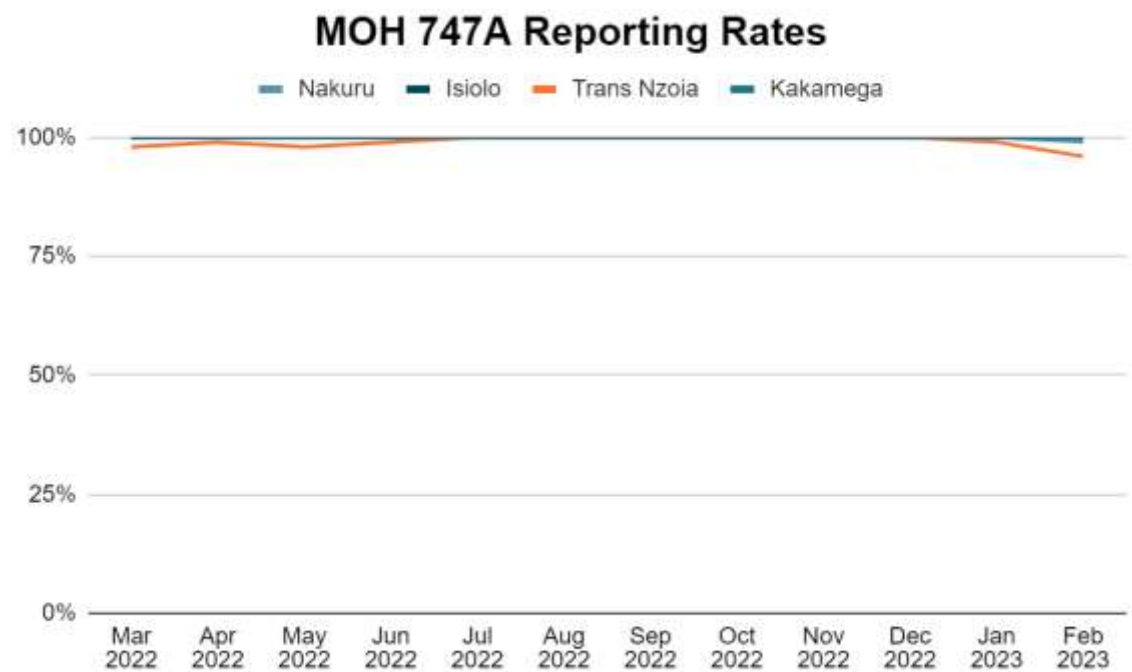
Data Availability & Quality

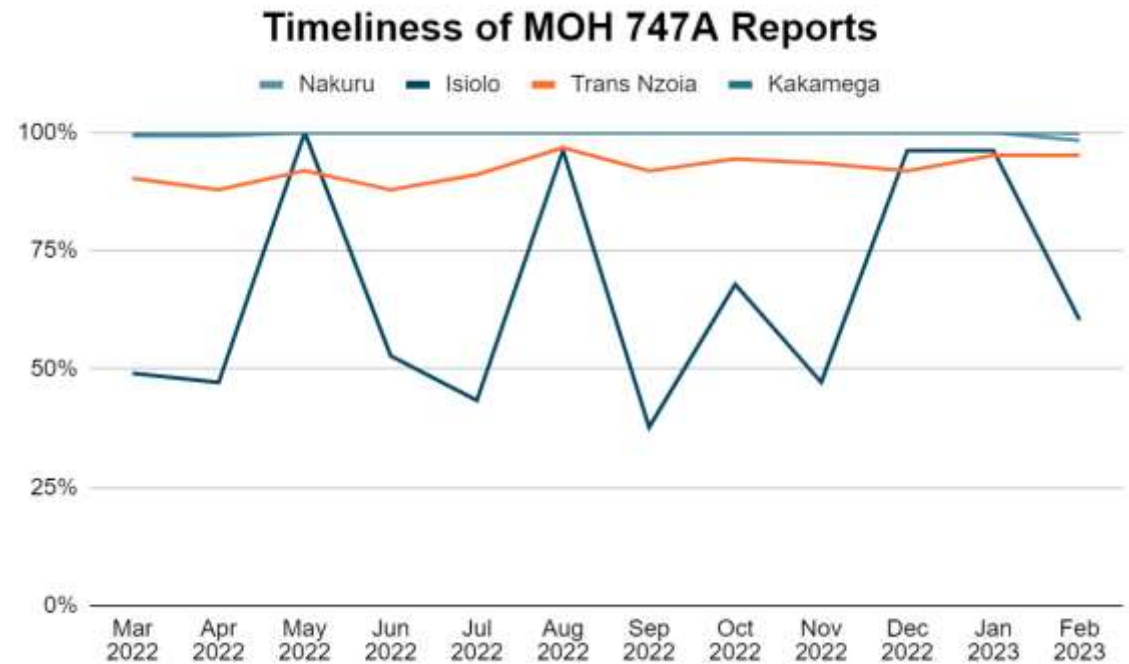




Data Availability & Quality

All 4 counties averaged 100% reporting rates for FP (MOH 747A), reflecting the maturity of FP reporting. Kakamega and Nakuru also have an average of 100% reports on time





Better results are seen in counties where inventory management relies on institutionalized monthly physical counts and stock card updates

	Isiolo	Kakamega	Nakuru	Trans Nzoia
Record keeping Stock card updates	Stock cards maintained to manage inventory and to track stock, not updated across all products	Stock cards kept for each commodity and updated regularly	Stock cards kept for each commodity but some are **not updated**	Stock cards kept for each commodity but some are **not updated**. Stock counts done **infrequently**
Availability of reporting tools, use of electronic systems	**Shortage of the reporting** tools especially in lower level facilities; many facilities using MOH 747A photocopies	**Shortage of reporting tools** characterized with photocopying	There is a **shortage of the MOH 747A** tool and many facilities were using photocopies to report.	There is a **shortage of MOH 747A** tools and many facilities were using photocopies to report
	County referral used electronic system for HPTs management	Electronic system available at County referral hospital but not functional	Electronic system available and in useat at Nakuru PGH and Naivasha SCH, better data quality reported	No use of electronic system except for one facility which was used for HIV and Malaria commodities
Inventory Management	Stock taking deprioritized, shortage of staff cited as the challenge	Physical counts done monthly	Monthly physical counts not consistently done across facilities	Physical counts not consistently done on a monthly basis across facilities
Inventory accuracy	Only two facilities with above 80%	Majority of facilities have 80% and above	All facilities have 90% accuracy	Majority of facilities have 80% and above

Counties vary in frequency, consistency of data use meetings with heavy partner reliance, which drives the focus and structure of meetings

Data Use

Nakuru

- TWGs exist at county and sub county level
- Data review meetings are either held monthly (Engashura level 3) or quarterly (Annex level 4) depending on the hospital with the whole staff involved
- Data use is focused on HIV, TB, Malaria, HPTs.
- Supported by USAID Tujenge Jamii

Kakamega

- Facilities hold data review meetings monthly before submitting reports. County holds meetings on a quarterly basis. Gap exists at sub county levels
- Key indicators at county data review: Skilled care deliveries, maternal and neonatal deaths, FP uptake, commodity availability, live births, reporting rates
- County HPTU is in place but not fully operational. Kakamega was a pilot county, along with Makueni and Kitui
- Conduct support supervision and supply chain audits with Afya Ugavi using a standard checklist

Trans Nzoia

- Saboti SCH conducts random data checks on the reports documentation during the reporting period.
- All reports go through the HRIO/ Facility-in-charge for data quality checks
- Data review meetings are held monthly at sub county and in some of the facilities though not consistently done
- AMPATH and Afya Ugavi supports Kwanza SCH with data quality audits of reports before submission to the sub-county.

Isiolo

- On a monthly basis, facility incharges go for data review meetings, supported by Afya Nawiri.
- Focus of data use is driven by partner supported interest
- Monthly supervision visits done by sub county team
- Ideally, data quality meeting should be held every month at facility level and quarterly at county level. These are sporadic due to lack of support
- The meetings are also cramped with other issues, not enough focus on data.
- Facilities that conduct regular data review meetings are purely out of personal initiative.

Quantification is expensive, time consuming and not undertaken as an annual exercise in any county. County annual forecast estimates, when available, take time to be disseminated and used

Data Use

Data availability poses the greatest challenge to robust forecasting. Since data for all HPTs is not automated or available for forecasting, sample data has to be collected through time-consuming, expensive, externally supported field visits. Frequently, the methodology is to collect data from a high and low volume facility (e.g. level 2, 3) within a sub county and use that as proxy data, extrapolating to develop the forecast estimates for the county

- Because of the burden of data collection, often only consumption (issues) data is used

The table presents the latest forecasts, which are 2-3 years outdated and likely underestimate current county needs

County	Year of Last Quantification
Kakamega	2021
Nakuru	2021
Trans Nzoia	2021
Isiolo	2019

Quantification processes were also characterized by gaps in people, capacity, tools and motivation due to use of outputs

Data Use

People & Capacity

- There are no dedicated forecasting teams in any county and the people involved in forecasting vary by county
- High turnover in staff in some counties means team participation (and skills) changes frequently
- Forecasting skills may be variable - there was frequent confusion between the term ordering and forecasting at county levels

Tools

- No consistent tools or templates were available for forecasting and quantification
- Excel workbooks with an excessive number of sheets are currently used

Use of Outputs & Motivation

- Even when forecasts are available, the estimates are used primarily as a resource mobilization tool but are not used for allocation. Allocation depends on county budget and county budget depends on ceiling given
- The lack of use of forecast estimates for financial allocation or procurement demoralizes staff and reduces the motivation to undertake robust quantification processes because the quantification data is not used by the county, leading to a chronic cycle of shortages

Product Availability: Summary

- Stock availability and stockouts were measured on the day of visit (DOV) as well as for the previous six months prior to the visit and stock status as a measure of inventory management was measured on DOV
- Inventory for most HPTs is not well managed - systems are characterized by understocks or overstocks, suggesting the need for significant improvements in inventory management practices
    - Understocks pose a risk for stockouts while overstocks pose a risk for wastage through expiries
- As to be expected, there were **fewer stockouts on DOV vs 6 months** for some products in 3 counties; in Nakuru stockout rates were consistent for both periods
- Emergency contraceptives was the only product consistently stocked out across all counties; amoxicillin, implants, gentamicin injection and dexamethasone injection had high stockout rates in individual counties

Average Stock Status on the Day of Visit

A Sampled Facilities				
Product name	**Nakuru**	**Isiolo**	**Kakamega**	**Trans Nzoia**
Emergency contraceptive pill	0	0	0	0
Amoxicillin 250 mg DT	1.4	6.6	5.4	4.5
Implants (Any available)	3.4	2.7	9.4	0.3
Vitamin K injection	1.3			
Female condoms	7.6	0	2.9	4.6
Calcium Gluconate Injection	6.1			
Dexamethasone injection 4mg/ml	2.8		5.1	
Chlorhexidine gel (20g tube)	1.7	0	9.1	1.1
Ferrous salt + folic acid (IFAS)	1.2		3.9	
Gentamicin injection	4.1	0	186	2.5
Magnesium sulphate 500mg/ml (50%)	4.9	27.6	33.1	12.7
Zinc ORS Co-Pack	9.8	7.4	8.9	36
Oxytocin 10 IU/ml	4.2	4.8	40.3	61
Misoprostol 200 mcg	2.6		0	
Nifedipine tabs	2.8			
DMPA-IM (Injectible)		1.8		8.9
Benzyl Penicillin Injection 1 MU		0		0

Key

- Stocked out [0]
- Understocked [0-3]
- Stocked according to plan [3-6]
- Overstocked [6+]

Stockouts on day of visit, past 6 months

Commodity	Isiolo		Kakamega		Nakuru		Trans Nzoia	
	DOV	6 mos	DOV	6 mos	DOV	6 mos	DOV	6 mos
Amoxicillin 250mg DT	0%	50%	13%	25%	60%	70%	0%	31%
Oxytocin 10IU/ml	50%	0%	25%	25%	0%	0%	0%	18%
Implants (Any available)	13%	75%	13%	25%	50%	88%	70%	50%
DMPA-IM (Injectable)	0%	57%					0%	25%
Vitamin K injection					50%	50%		
Female condoms	50%	20%	67%	50%	40%	40%	38%	25%
Calcium Gluconate Injection					33%	33%		
Chlorhexidine gel	75%	33%	25%	25%	33%	50%	70%	38%
Dexamethasone injection			71%	57%	33%	33%		
Benzyl penicillin Injection 1 MU	100%	11%					20%	40%
IFAS			0%	50%	30%	30%		
Gentamicin injection	71%	38%	0%	25%	20%	20%	42%	50%
Magnesium sulphate	0%	25%	25%	50%	17%	17%	17%	8%
Zinc ORS Co-Pack	11%	11%	0%	14%	11%	44%	0%	8%
Misoprostol 200mcg			40%	60%	0%	0%		
Nifedipine tabs					0%	0%		
Emergency Pills	75%	25%	100%	67%	100%	100%	100%	100%

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CO-CREATING INNOVATIONS FOR HEALTH

Really a stockout? While emergency pills show consistent stockouts across all counties, emergency pills are not procured for distribution in the public sector, so this may not be a true reflection of a stockout

0%	
1%-20%	
21%-50%	
>50%	

Opportunities

Theme	Opportunity
Data availability, quality and use	• Printing and dissemination of updated FP tools • Introduce IMPACT Team approach and support a structured approach to data review meetings at facility and sub county level and within HPTUs at County to include **supply chain, financing and procurement data** • Build capacity on data for decision making • Adoption of DHP or electronic inventory management systems in high volume facilities to enhance real time data visibility
Commodity availability	• County to negotiate and explore strategic partnership with MEDS • Supplier diversification – county exploring prequalifying 2 more suppliers • Expiry tracking system EMMS • In collaboration with other partners and county governments, ensure redistribution of commodities within facilities i.e. from overstocked to understocked facilities • Commodity management trainings especially for lower level facilities through leveraging on elearning platforms
Workforce	• Capacity building on supply chain management processes prioritizing lower level facilities with non-pharmaceutical staff (through IMPACT Teams) • Finalization and digitization of curriculum on commodity management developed by DHPT • HCD research indicates an appetite for microlearning at all levels, facilitated by CPD points • Advocate for rationalization of staff based on the workload by the county
Quantification	• Support and enhance existing quantification processes • Annual quantification review • Operationalize County HPTU unit • Capacity building on quantification for new and continuing staff

Procurement Findings

Procurement Strategy Policy and Process

- Main supplier for HPT' s is KEMSA in counties..
- KEMSA has favorable credit terms and distributes to the last mile.
- PHC facilities are more adversely affected with the low order fill rate and long order turnaround time.
- Debt impacting order placement to KEMSA and other suppliers
- Lengthy county internal ordering processes .

Better performance on OFR and TAT at Level 4 & 5 facilities compared to PHC facilities

- Detailed Annual Procurement plans prepared in the counties.
- Weak link between APP, budgets and the quarterly planning activity
- Manual processes at lower level facilities impacting on efficiency in the ordering process
- No periodic stock take noted in one of the counties.

Facillities sampled managed to place only 2 orders to KEMSA in 2021

Procurement Findings

Process & People

- Back order process from KEMSA is a bottleneck as deliveries are made centrally.
- Timing and communication of back order deliveries affecting service delivery.
- Lack of clear reverse logistics process for near expiries and no redistribution process for overstocked commodities was noted.
- Supplier prequalification process not uniformly carried out in the counties.

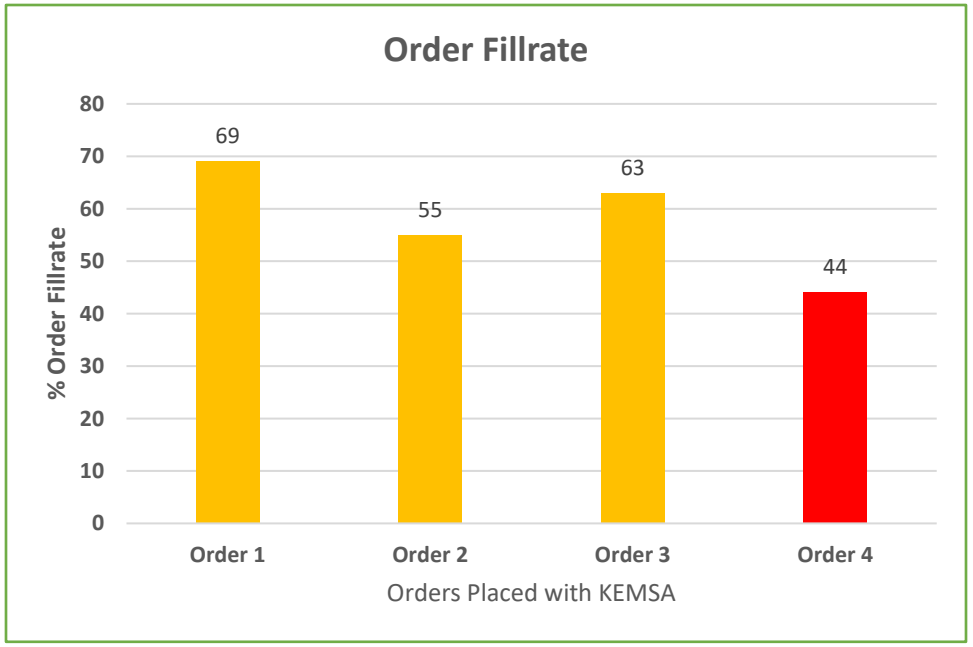
High stock levels of Oxytocin and ORS noted in some facilities

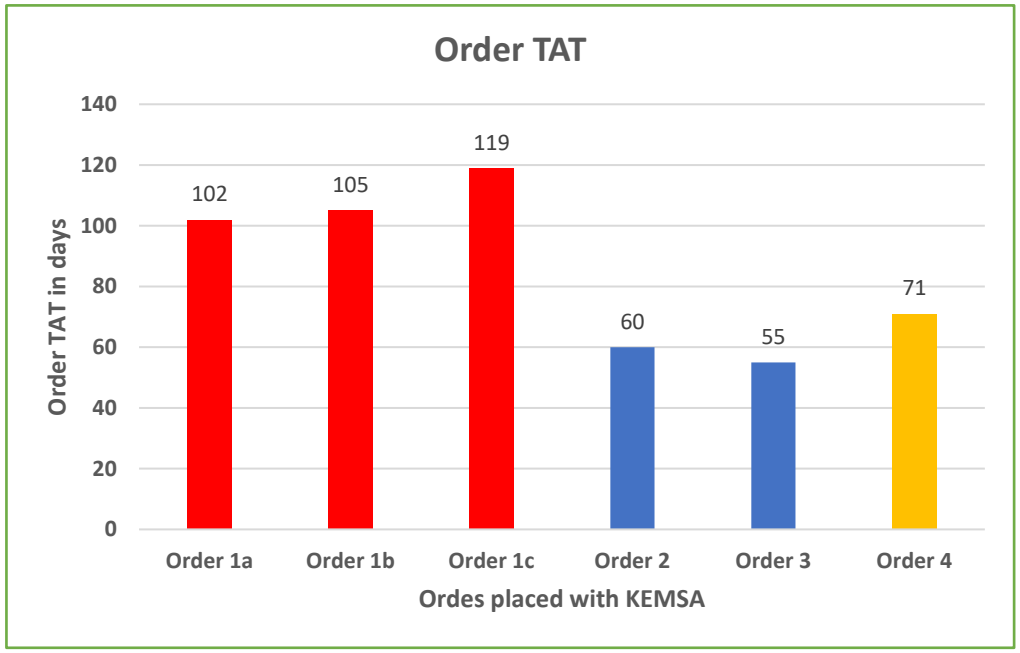
- PHC facilities are not adequately resourced.
- Procurement representation in the HPTU ‘s not uniform across all counties.
- Procurement staffing mostly concentrated at the county hospitals- levels 4 & 5.
- Non procurement personnel and technical staff carrying out procurement activities in addition to their core duties.

One officer serving up to 9 level 2 & 3 facilities observed in one county

Sampled OFR and Order to Delivery TAT

Sampled Orders placed to KEMSA





- Sample orders placed between 2019 and 2021
- Erratic OFR and TAT noted
- Further RCA required to determine the actual TAT in county processes (PHC to Sub County-County)
- Orders from facilities are rationalized at Subcounty/County levels, depending on available funds-. important in determining the right cause of action to correct the OFR.

Source Author based on data collected

Legend

Good
Average
Poor

Procurement Findings

Analysis of HPT Sources and Bottlenecks in a Sample County

Prequalified Suppliers

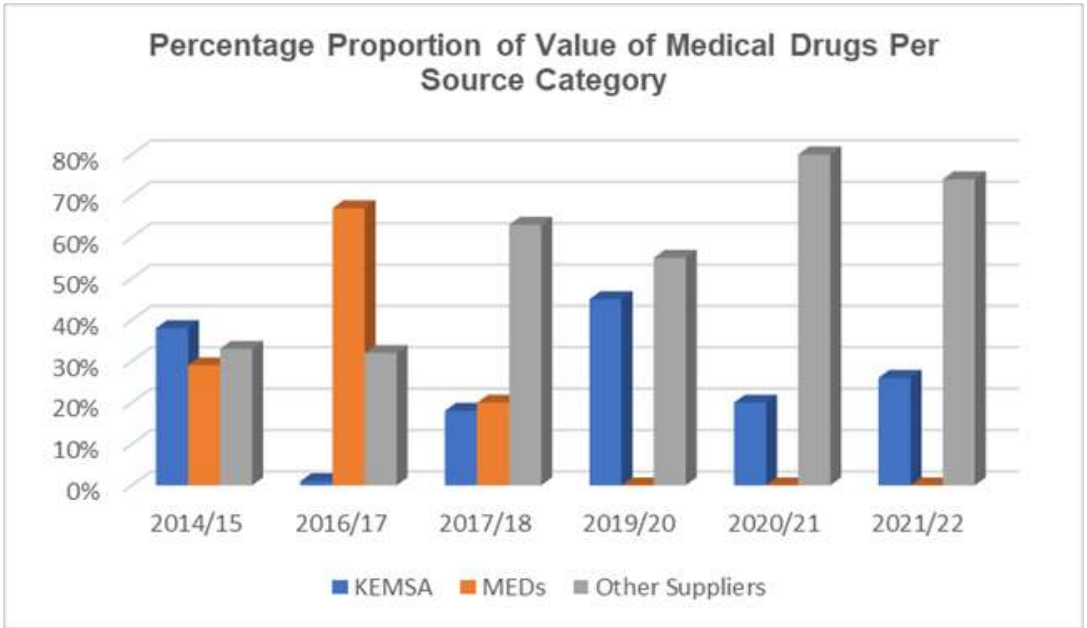
- No list of prequalified suppliers or other methods prescribed by law for selecting suppliers.
- Fragmented procurement due to the large number of suppliers engaged.

Pending Bills

- Overdue suppliers debts.
- Pending bills likely cause supplier shifting.

Commodity Pricing & Quality

- Erratic commodity pricing.
- Increased risk of quality issues due to the buying patterns.
- Likelihood of reduced planned volumes due to deviations from budgeted prices.

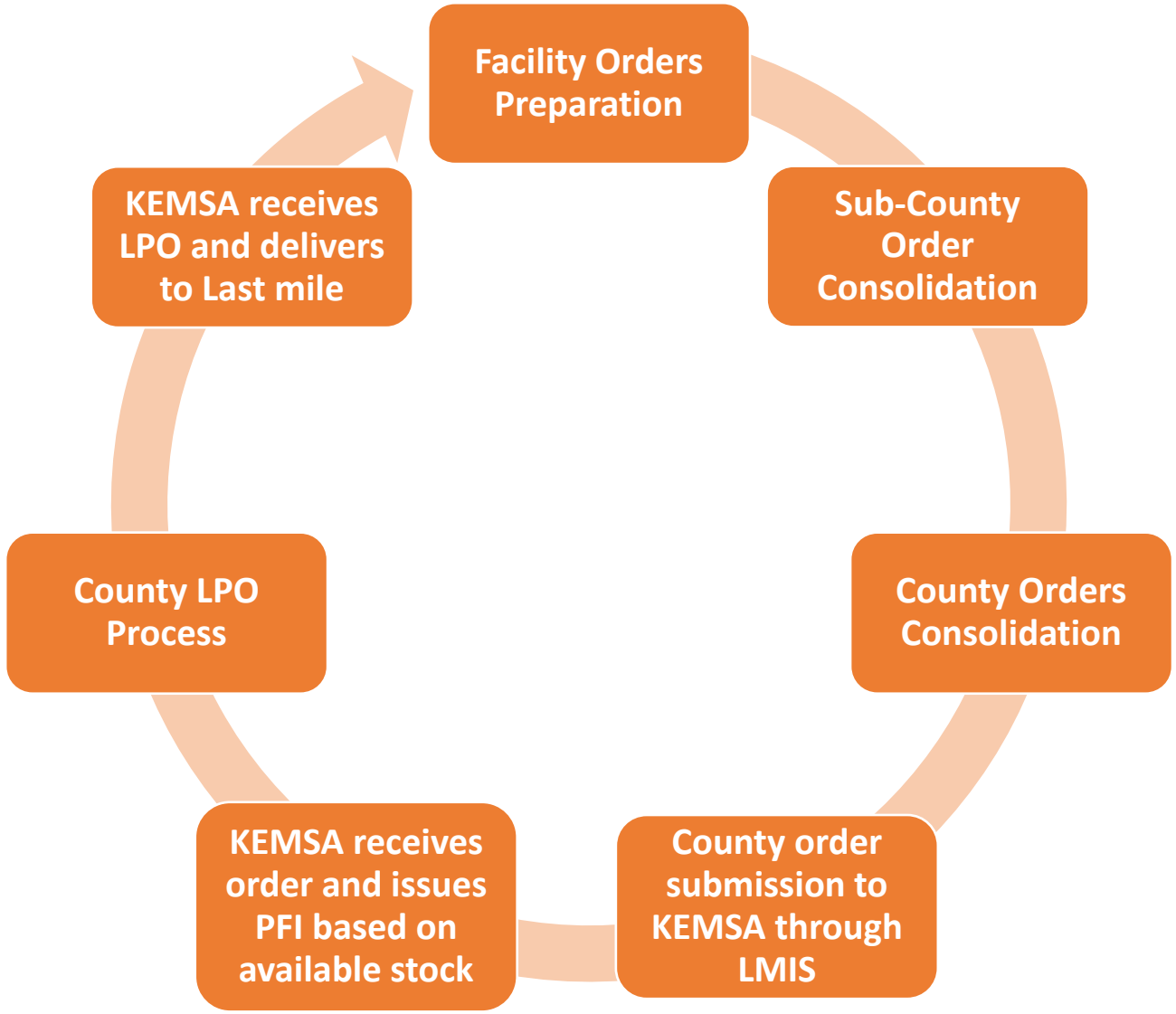


HPT Suppliers

- Significant shift from major suppliers KEMSA & MEDs to local suppliers in the last 2 years.
- Spend on other suppliers has increased from 15% in 2015 to 74% in 2021/2.

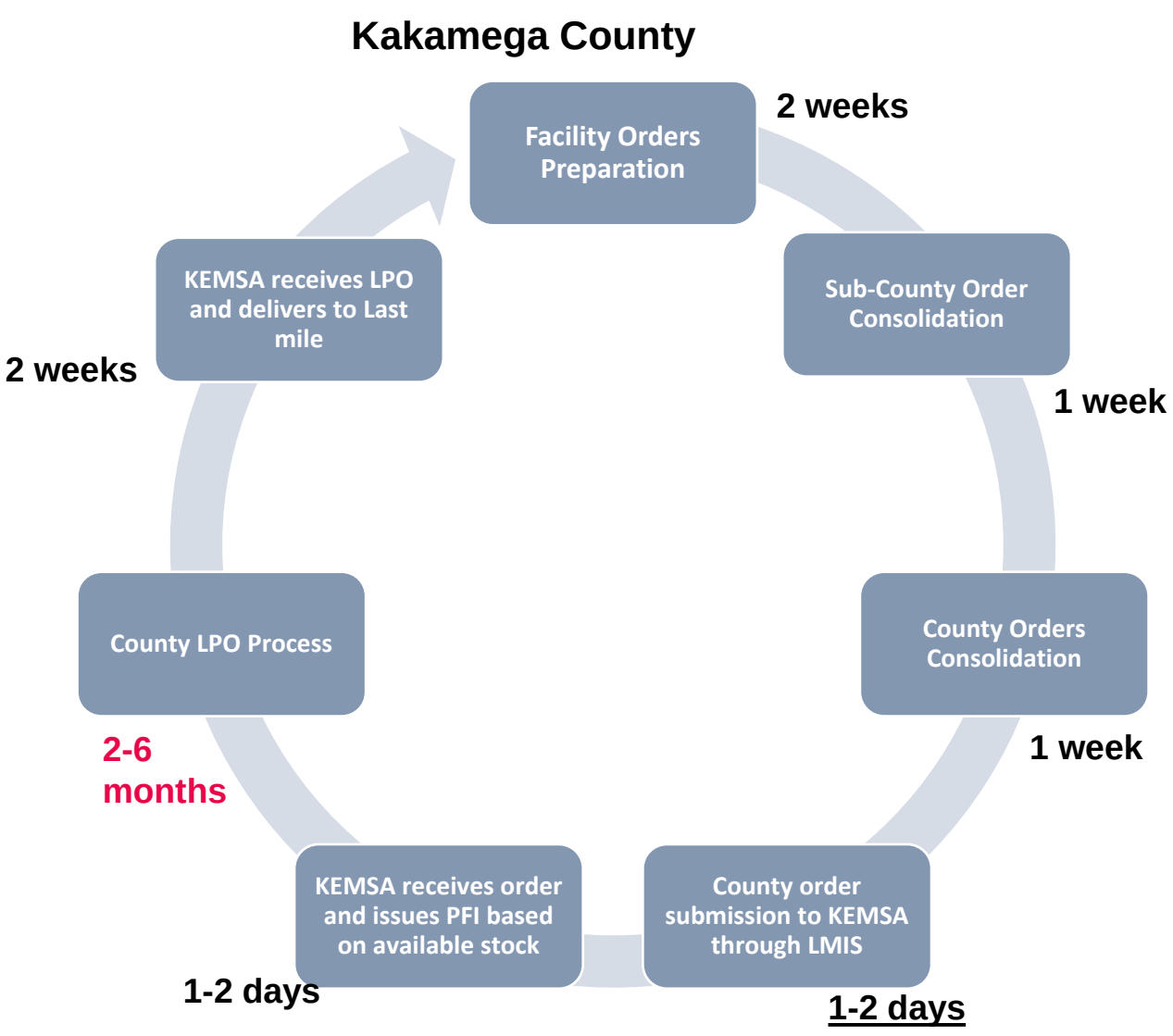
Commodity Ordering Process

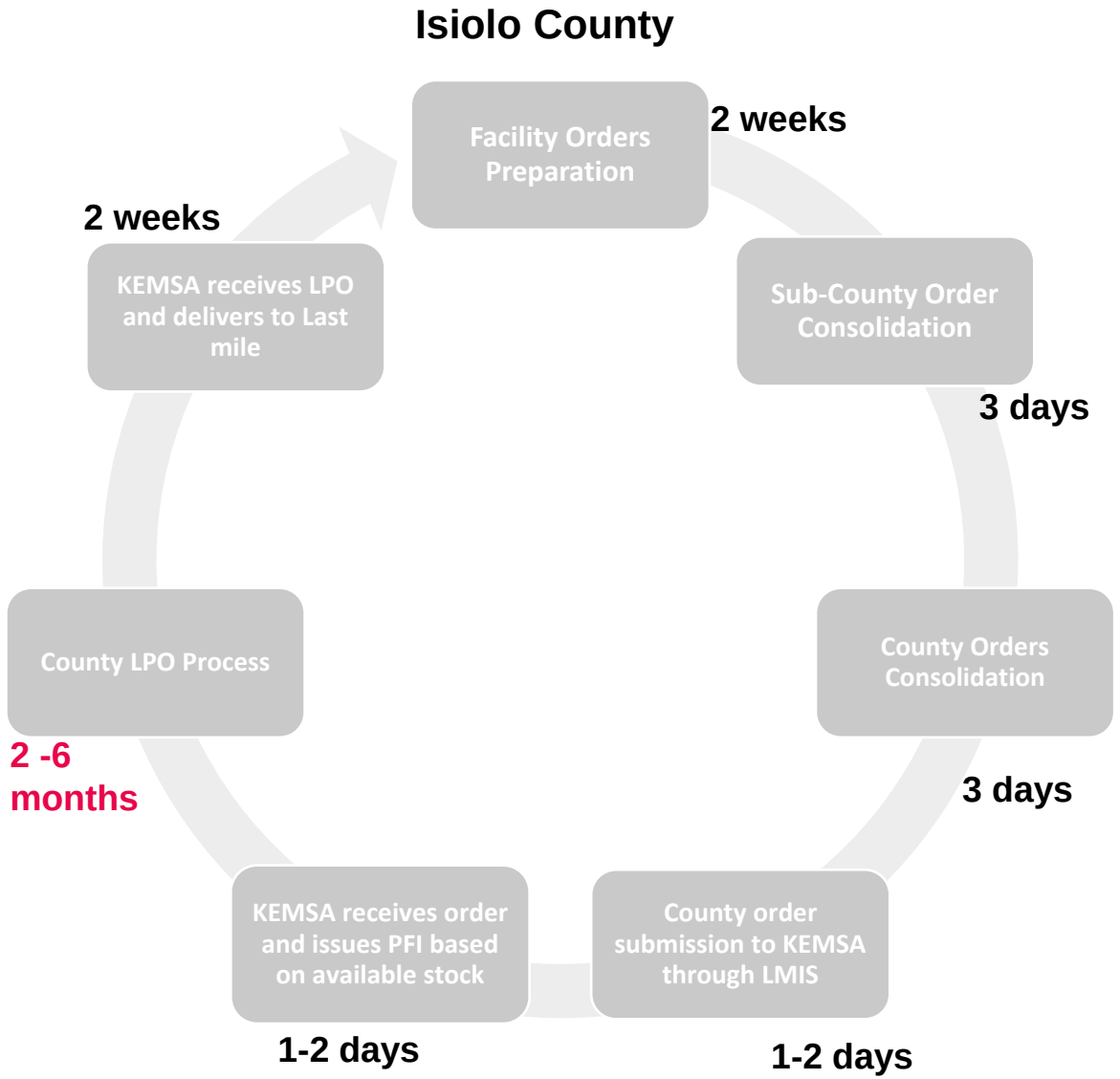
Facility Order to Facility Order Delivery



Commodity Ordering Journey

Learnings across counties





SWOT ANALYSIS –SAMPLED COUNTIES

Strengths and Weaknesses

Strengths

- Last mile deliveries by KEMSA in 2 counties.
- Rationalized supplier base through supplier prequalification process in one county
- Good performance on OFR and TAT in County hospitals.
- High inventory accuracy recorded where automated systems are in use.
- Clear demonstration of knowledge and compliance to PPADA and regulations was evident in some counties.
- HPTU is in place and running with support from Afya Ugavi in the counties.
- Increase In allocation for HPT from 50M in 2014 to over 100M in 2023 in Isiolo county.
- Partners support in counties.

Weaknesses

- Irregular disbursements of funds, impacting on effective procurement planning.
- Pending bills adversely affecting delivery of supplies from key suppliers.
- Engagement with many suppliers in one county which translated to fragmented procurement.
- Lengthy internal order processing time. (Facility-Subcounty-County)
- Unfavorable payment terms with local suppliers (immediate payments recorded in some facilities).
- High order turnaround time and low fill rate particularly at the PHC facilities.
- Gap in quantification expertise at lower level facilities.
- Lack of procurement support may lead to maverick buying & poor contract management practices.

SWOT ANALYSIS –SAMPLED COUNTIES

Opportunities

Opportunities

- Review current procurement processes in their entirety to identify gaps and develop SOPs & manuals, aligning them with country procurement law, regulatory requirements and best practices.
- Workforce development- enhance knowledge in procurement & supply to ensure staff are well equipped to carry out procurement activities effectively and efficiently.
- Supplier relationship management to improve communication and debt management.
- Facility autonomy in key procurement decisions.
- Automate and utilize IT optimally in procurement & supply chain management at all levels of the HF to improve efficiency and accountability

Opportunities

- Build county procurement's ability and capacity to carry out market price surveys and collaborate effectively with KEMSA on pricing decisions.
- Inclusive and coordinated forecasting & quantification process.
- Placement of procurement officers at strategic points e.g. ICTRH
- Prequalification of suppliers and framework contracting when required.
- Align the HPT budgeting process and procurement timelines
- Address reverse logistics challenges and formulate HPT’s redistribution strategy.

Joint work-plan supply chain partners

Outcomes	May-2023	June-2023	July-2023	Aug-2023	Sep-2023	Oct 2023	Nov 2023	Dec 2023
Streamlined F&Q								
Data use and data driven decision making								
Increased allocation and absorption of HPT Budgets								
Increased fiscal space for supplies								
Increased financial and managerial autonomy								
Streamlined procurement processes								
Availability HRH for supply chain								
Operationalize the HPTUs								
Capacity building financing, procurement, and supply								