SAMOSPHARMA
LIMITED
Advancing Lives

Samospharma Industry Voice | Edition Two

YOU CANNOT MANAGE WHAT YOU COUNT ONCE A MONTH



REAL TIME STOCK MONITORING

EARLY PILFERAGE DETECTION

REDUCE EXPIRES

YOU CANNOT MANAGE WHAT YOU COUNT ONCE A MONTH

An expired carton and a stolen carton look remarkably similar in a paper ledger. Both appear as inventory that was supposed to be there. Both become a financial loss. The difference only becomes visible if something recorded the movement, and in most systems nothing did.

That is the problem with inventory built on periodic visibility. Pharmaceutical distribution is too valuable, too regulated and too time sensitive to be run from yesterday's stock position.









THE SCALE GHANA HAS TO SEE

Ghana's Health Sector Medium-Term Development Plan (2026-2029) maps out a vast national network: teaching and regional hospitals, over 500 standard hospitals, thousands of clinics and health centres, and 7,270 CHPS compounds. Combined, the national database records over **10,000 distinct points of care**.

That is ten thousand locations where a carton of medicine can be held, moved, dispensed, lost, or allowed to expire.

While government facilities technically dominate this count, that figure is heavily skewed by the CHPS compounds. If you set that foundational tier aside, the landscape flips: non-government providers (private, CHAG, quasi-government, and faith-based) account for roughly 60 per cent of the remaining facilities.

Yet, for a commercial distributor, this official count is missing two massive pieces of the puzzle. First, retail pharmacies and licensed chemical sellers are not classified as health facilities, meaning the tier where a huge volume of medicine physically sits is entirely absent from the data. Second, private sector reporting into the national DHIMS2 database is notoriously incomplete; historically, fewer than half of registered private clinics submit their data.



Consequently, 10,000 points is a floor, not a ceiling. More importantly, the segment of the network with the weakest data visibility is exactly the segment a distributor supplies the most.

When you overlay this fragmentation with the country's acknowledged regional inequalities, the operational reality becomes clear: a visibility system that works beautifully in Accra but fails in Nalerigu has not solved the problem it was bought to solve.



GHANA HAS ALREADY BUILT THE PLATFORM



The Ministry of Health launched the Ghana Integrated Logistics Management Information System, GhILMIS, to coordinate demand and supply chain processes, address shortages arising from delayed approval and procurement, improve forecasting and close the gap in stock data. The Health Supply Chain Master Plan 2025 to 2029 builds on that rollout and structures its improvement pathways against a national supply chain competency assessment.

The direction is correct. The caution is simple. An electronic system digitises bad data as efficiently as good data.

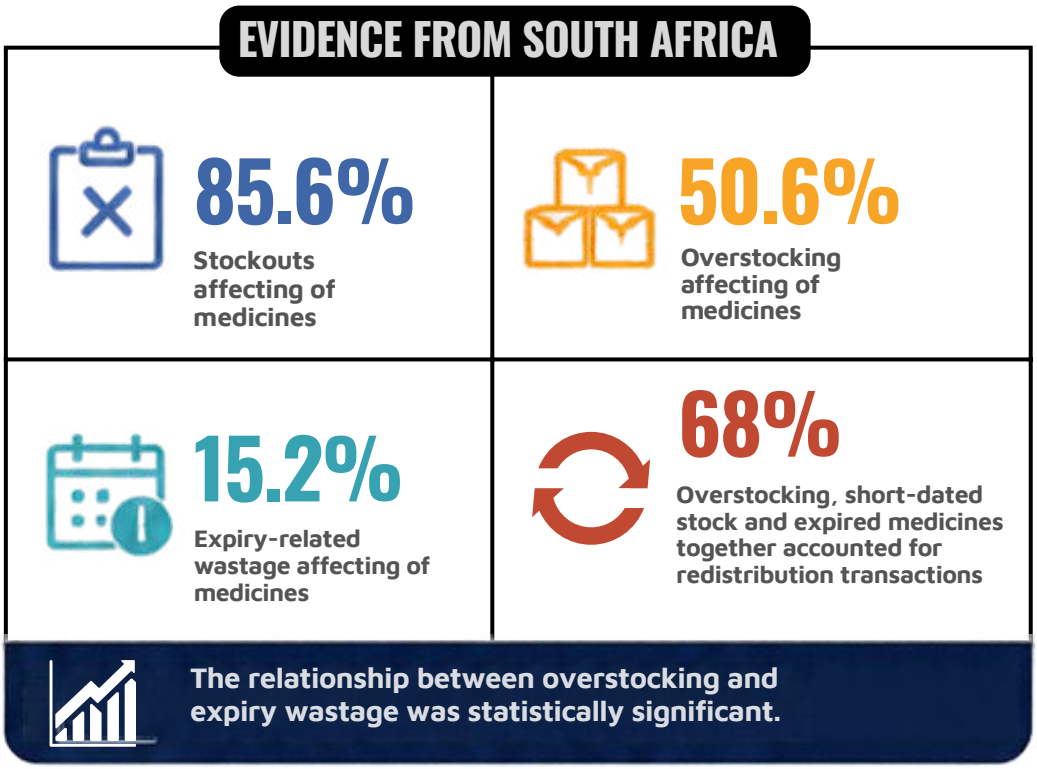
The useful question is therefore not whether an organisation has an inventory system. It is whether the organisation can see stock by location and by batch, see expiry dates, see movement, identify unusual adjustments, know what is approaching expiry before it becomes obsolete, see actual consumption rather than historical order patterns, and distinguish a genuine demand increase from leakage. Where the answer is no, what exists is electronic record keeping. That is a different thing from visibility.



STOCKOUTS AND EXPIRIES ARE NOT OPPOSITES

The conventional response to a stockout is to buy more, and to excess stock is to buy less. Both can be wrong, because the underlying problem is frequently information rather than quantity.

A study of 392 medicines across eight public healthcare facilities in King Cetshwayo District, KwaZulu-Natal found stockouts affecting 85.6 per cent of medicines, overstocking affecting 50.6 per cent and expiry-related wastage affecting 15.2 per cent. Overstocking, short-dated stock and expired medicines together accounted for 68 per cent of redistribution transactions, and the relationship between overstocking and expiry wastage was statistically significant.



That is South African data from one district and one set of facilities. It is not evidence about Ghana and should not be read as such. What it establishes is a mechanism that travels. A system can hold too much medicine and too little medicine at the same time, and the cause is allocation and information rather than purchasing capital



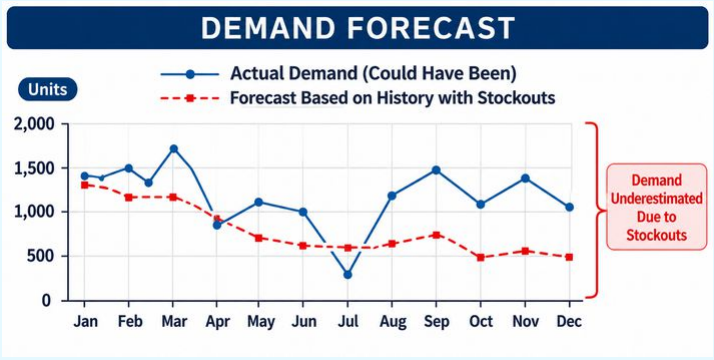
An expiry is an inventory management failure until proven otherwise. Shrinkage is its twin.

A study of public health facilities in Dessie, Ethiopia recorded overall pharmaceutical wastage of 3.68 per cent over the study period, with expiry accounting for 92.05 per cent of the reasons for that wastage. Ethiopian facilities, an Ethiopian period. The transferable point is that expiry becomes the dominant component of wastage once inventory control weakens, and that the cost is never only the purchase price. An expired medicine has already consumed warehouse space, working capital, handling time, transport capacity and management attention, and it may still require controlled destruction and regulatory documentation.

Medicine sitting in the wrong warehouse is not available stock. Medicine that expires before dispensing is not productive inventory. Medicine that disappears without an accountable transaction is not inventory at all. It is leakage.

A STOCKOUT TEACHES THE FORECAST THE WRONG LESSON

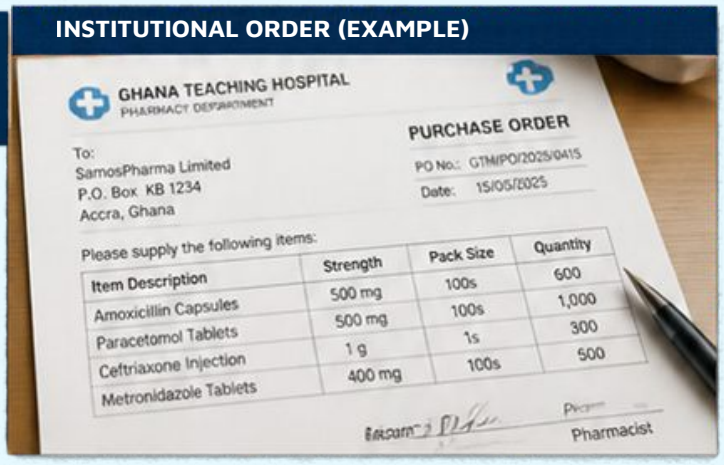
Forecasting is where the cost of poor visibility compounds, because a forecast is only ever as good as the history it learns from, and most distributors feed theirs the one numberguaranteed to missled.



Consider what a sales history actually records. It records what was ordered and fulfilled. It does not record what was needed. When a line was out of stock, the history shows a low number or a zero, and the forecast reads as that is falling demand. The following period is planned down, the stock cover is cut, and the line goes short again sooner. The forecast has learned from its own failure and repeated it.



Demand that could not be met was never demand that did not exist.



The same distortion runs through institutional ordering. A hospital and budget pressure orders less than it dispenses and draws down its own shell. A facility setting its involves late orders in smaller, more frequent lots to manage cash. A customer that has reduced moved part of its volume elsewhere still appears in the history at atle a quietly low steady rate.
In all three cases the order book is reporting the customer's financial position rather than the patient's need, and a forecast built on it is modelling the wrong variable.

Institutional demand is also lumpy by nature. A hospital that orders quarterly in bulk produces a series of spikes and troughs that can an averaging forecast smooths into a line resembling neither. The smoothed line then drives a replenishment plan that is too low in the ordering month and too high in the months between, which is overstocking and stockout generated by the same calculation.

Three practical consequences follow for any distributor.

1 Record the stockout, not only the sale.

A line that was unavailable should be flagged in the demand history so the forecast can treat the period as censored rather than as evidence of low demand. Unfulfilled and partially fulfilled order lines are the cheapest demand signal a distributor already owns and almost never uses.

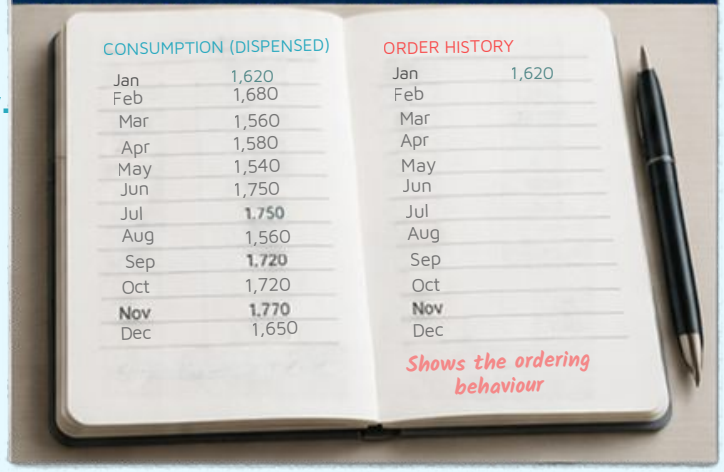
QUARTERLY ORDERING PATTERN



2 Forecast the moving lines separately.

A top 50 by value behaves nothing like a long tail of slow movers, and a single method applied across both will be wrong at each end. Start the model, the horizon and the error measure, because a forecast accuracy figure without those three is not a measurement.

CONSUMPTION VS ORDER HISTORY



3 Get as close to consumption as the relationship allows.

Where a customer will share offake or dispensing data, the forecast improves immediately, because it stops modeling an ordering decision and starts modeling a clinical one.

> Forecast error is not a planning inconvenience. Over-forecast and the excess ages on the shelf until it is written off. Under-forecast and the line goes short. The expiry and the stockout at the two ends of this article are the same forecast error, read in opposite directions.



PILEFARGE IS ALSO A VISIBILITY PROBLEM

A monthly count tells management that something is missing. It does not say when it disappeared, when, how, or who had custody of the time.

Transaction-level visibility changes the question. Every movement should generate a digital event or receipt, put-away, transfer, pick, dispatch, deliver, return, adjustment, quarantine and destruction. Once the trail is complete, abnormal behaviour becomes detectable. A particular line repeatedly adjusted to some operator. A branch receiving more stock than its consumption profile supports. A high-value product with unexplained shrinkage. A batch approaching expiry in one location while another sells the same line quickly. Those are operational signals before they are accounting anomalies.

THE LESSON FROM RWANDA

RWANDA MEDICAL SUPPLY
Your Health, Our Priority

A 2026 study of the electronic logistics management information system at Rwanda Medical Supply is useful because it reports both sides honestly. Users identified real benefits in stock monitoring, data visibility, order management and data collection, and confirmed that visibility of stock and shelf life supported redistribution decisions and first expiry first out, reducing both stockouts and expiries.

The same study identified four barriers. Inaccurate data at the point of entry. Lack of interoperability between central and facility systems. Inadequate training for facility store managers, worsened by turnover. And the absence of automated alerts, which left a system capable of flagging a short-dated batch waiting for a human to look.

None of those four is a technology failure. All four survive a software procurement untouched. Closing them requires operating discipline before software selection.



WHAT WE RUN

- Samospharma captures batch, manufacture record and expiry date at goods receipt across the distribution network, which is the condition for first expiry first out and for a functioning recall.
- Stock movements are logged continuously rather than reconciled periodically. Exceptions are raised and acted on the day they appear. The monthly review governs accountability for the variances already surfaced rather than serving as the moment of discovery, which is the distinction this article is about.
- The discipline is not the dashboard. The discipline is that somebody has to explain the variance in a room, by name, weekly, monthly, quarterly till there's no occurrence to explain.

THREE CHANGES WORTH MAKING BEFORE BUYING ANYTHING

One for each of the three losses.

1.

Capture batch and expiry at goods recall.
If the system does not know the expiry date when product enters the warehouse, it is already too late to manage expity intelligently, and no visibility platform can recover data that was never captured. This is also the condition for a functioning recall.



2.

Forecast from consumption rather than from your own order book.

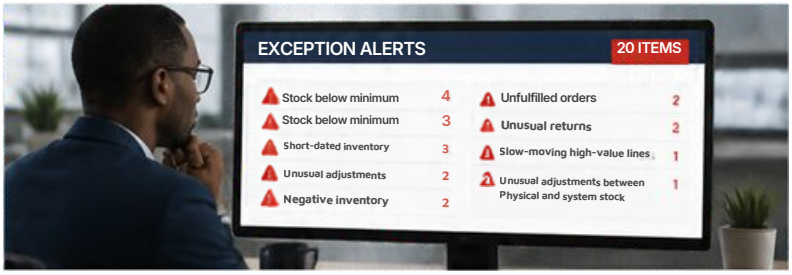
Flag the censored periods, separate the moving lines from the tail, and state the method, horizon and error measure alongside any accuracy figure. Getting closer to consumption means connecting systems rather than building another island, so warehouse management, accounting, sales, procurement and customer ordering should exchange data through controlled interfaces or APIs. Interoperability belongs in the procurement condition rather than in a later integration project, because Ghana already carries documented interoperability gaps and another closed system deepens them.



3

Manage by exception.

Managers should not read five thousand lines of inventory on a Monday morning. They should receive the twenty items requiring intervention: stock below minimum, stock above maximum, short-dated inventory, unusual adjustments, negative inventory, unfulfilled orders, unusual returns, slow-moving high-value lines and discrepancies between physical and system stock. That is the point at which data becomes management.



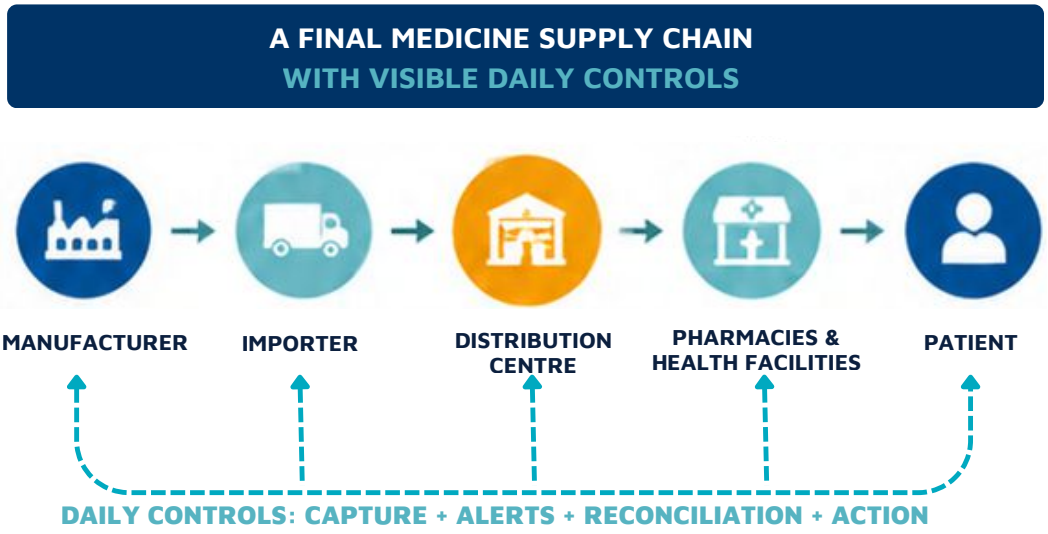
THE UNCOMFORTABLE CONCLUSION

The industry has spent years asking whether it has enough stock. The better question is whether it knows enough about the stock it already has.

A carton in the wrong branch is not availability. A carton hidden inside an inaccurate system is not availability. A carton approaching expiry without an alert is not healthy inventory. A carton that disappears between two unexplained transactions is not a stock variance. It is a control failure.

Pilferage, expiry and forecast error look like three problems and behave like one. Each is what a chain produces when it cannot see its own stock in time to act. A system that tells you where a carton is, when it expires and what was actually consumed addresses all three at once, and no amount of counting at month end addresses any of them.

You manage what you can see, explain and act on every day.



Disclosure. Samospharma operates in pharmaceutical distribution and has a direct commercial interest in inventory efficiency and control. The recommendations are offered as industry practice and carry no claim about any named competitor or supply chain operator.