

TASK 1: DAILY CLINIC INVENTORY MICRO-AUDIT SYSTEM

Role Context

I am acting as the Clinic Business Analyst responsible for maintaining inventory accuracy and billing discipline in a small clinic pharmacy. The clinic operates under real-world constraints: medicines are not barcoded, sales entries are typed manually, errors are small but frequent, and doctor time is extremely limited.

The objective of this system is **not reconciliation**, but **early detection of error patterns**, improved staff discipline, and prevention of month-end inventory shocks — while keeping the doctor insulated from daily operational noise.

Objective of the Micro-Audit

- Detect sales-entry and inventory errors early
- Improve billing accuracy through behavior correction, not punishment
- Maintain inventory reliability with minimal daily effort
- Protect doctor time by handling operational issues independently

Time Constraint:

20–30 minutes per day

Designed to run consistently even on busy clinic days

STEP 1 — Identify High-Risk Medicines (One-Time Setup)

Since it is not feasible to audit all medicines daily, a focused list of **high-risk medicines** is created. These medicines are monitored every day because errors involving them are more likely and more impactful.

Selection Criteria Used (minimum three applied):

- High daily sales volume
- Similar or confusing name variants
- Frequently prescribed by the doctor
- Higher value per unit

High-Risk Medicine List

Medicine (Master Name) Reason for High Risk

Dolo 650 Very high volume + multiple name variations

Azithromycin 500 Abbreviations and partial names used frequently

Pantoprazole 40 Frequently prescribed across OPD cases

 **Time Required:** ~30 minutes (one-time activity)

STEP 2 — Daily Name-Variation Check (10 minutes/day)

What is Done Daily

- Filter the **Sales Register** to show only high-risk medicines
- Manually group similar or incorrect medicine names to their correct master name

Example Mapping

Entered Name Variants	Mapped to Master Name
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Dolo / Dolo kind / Dolo 650 Dolo 650

Azithro 500 / Azithromycin Azithromycin 500

What is Flagged

- New name variants not seen earlier
- Misspellings or partial names
- Informal abbreviations

Action Taken

- Add the new variant to the internal mapping list
- Inform billing staff to use the standard master name going forward

Purpose:

Reduce name-based errors at the source and standardize staff behavior.

STEP 3 — Daily Usage Reasonableness Check

What is Checked

For each high-risk medicine:

Expected Closing Stock

= Opening Stock + Purchases – Total Sales (after name grouping)

This expected value is compared with the **actual closing stock**.

Sample Check Table

Medicine	Expected Closing	Actual Closing	Difference	Action
Dolo 650	1,460	1,440	-20	Review sales entries
Azithromycin 500 490		480	-10	Acceptable

Tolerance Rule

- Differences beyond **±2%** are flagged
- Minor deviations within tolerance are observed but not escalated

Purpose:

Catch incorrect entries early before they accumulate into major discrepancies.

STEP 4 — Random Bill Spot Check (5–10 minutes/day)

What is Done

- Randomly select **3–5 bills** involving high-risk medicines
- Verify:
 - Medicine name matches the master name
 - Quantity sold is reasonable relative to prescription

Why Random?

- Staff cannot predict which bill will be checked
- Encourages consistent attentiveness without fear
- Improves billing discipline organically

Output

- Errors (if any) are logged in a simple tracker
 - No penalties — only correction and clarification
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STEP 5 — Error Pattern Tracking (Weekly Review – 15 minutes)

A simple **Error Log** is maintained to identify recurring issues.

Sample Error Log

Date	Medicine	Error Type	Repeated?
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Aug 1 Dolo 650 Name variation Yes

Aug 3 Dolo 650 Quantity error No

Weekly Decision Rules

- Same error ≥3 times → Staff retraining
- Errors across multiple medicines → SOP update
- Single isolated errors → No action

Purpose:

Shift from correction to prevention by addressing patterns, not incidents.

STEP 6 — Doctor Escalation Rules

The doctor is involved **only when absolutely necessary**.

Doctor escalation happens **only if**:

- Financial impact is material
- Inventory mismatch affects patient treatment availability
- Same error pattern continues despite staff correction

All routine corrections, reviews, and follow-ups are handled independently without disturbing the doctor.

DAILY MICRO-AUDIT CHECKLIST (Summary)

- Review high-risk medicine sales entries
- Group name variants and update mapping
- Perform expected vs actual stock check
- Conduct random bill spot checks
- Log any errors found

 Total Daily Time: 20–30 minutes

WEEKLY CHECKLIST (Summary)

- Review error log for patterns
- Decide retraining or SOP updates if needed
- Confirm no unresolved material discrepancies

 Weekly Time: ~15 minutes

Outcome of This System

- Early detection of billing and inventory errors
- Improved staff discipline without punitive measures
- Reduced month-end inventory shocks
- Minimal doctor involvement
- A system that can realistically run every day in a busy clinic