

Digital Inventory Tracker for E-Commerce Pharmacy Operations

What is Stupid?
Why is it Stupid?

Stocks for Retail Pharmacy e-commerce business are sourced from Towers A & C and stored in Tower C for order processing. Stock movements were tracked manually using Excel, resulting in:

- No real-time inventory visibility across Towers A & C
- High risk of errors from manual consolidation
- Fragmented stock ownership and tracking
- Inefficient manpower utilisation for cycle counts
- No systematic expiry tracking mechanism
- Delays, recounts and inaccurate data from weekly cycle count reconciliation

What was Implemented?

A Python-based Inventory Tracking App was introduced to keep track of stocks located at Tower C

Before		Now	
Task			
Stock Balance Check	Manual count of each item	Automated query by code/description or file download	
Stock Balance Accuracy	Delayed, error-prone manual aggregation	Real-time retrieval	
Stock Receiving & Deduction	Line-by-line manual Excel entry with Vlookup	File mass upload	
Expiry Date Check	Manual check per item	System-based query with report function	
Manpower Coordination	Challenging, tedious, time-consuming	Minimal — downloadable report provided	
Stock Visibility	Fragmented across Towers A & C	Centralised database with real-time inventory query	



Future:

Explore scaling to areas beyond pharmacy:

- Monitor stocks placed in care areas not set up as pharmacy inventory locations, including the Diabetic Clinic, Orthopaedic Clinic, and Emergency Department
- Serve as a monitoring mechanism to improve stock visibility, tracking, and accountability across these locations

Impact

- Improved **Operational Efficiency** with reduced stock balance and expiry date checking with real-time query function.
- Time saved: 47.7 hours per month** on stock balance & expiry date check, cycle count, daily stock receiving
- Improved **Accuracy & Inventory Control** with mass upload function, which reduces top up and deduction time with no manual manipulation required.
- Positive **Financial Impact** with the automated expiry date monitoring which reduces expiry losses and revenue leakage through discrepancies.
- Enhanced **Risk & Governance** with centralised database that improved visibility, traceability, reliability and reduced discrepancy.
- Manpower & Productivity Gains** from eliminated repetitive Excel manipulation tasks. Coordination between towers for cycle count is minimised with downloadable file.

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- Improved Accuracy & Inventory Control, Enhanced Risk & Governance
- Manpower & Productivity Gains with Elimination of repetitive Excel-based tasks free up staff capacity



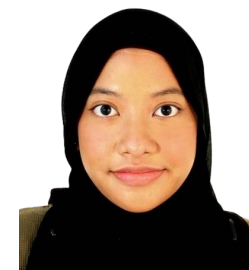
Quek Hui Chen,
Senior Principal Pharmacist



Adeline Tan,
Assistant Manager



Ilyia Syaza Binte Hamdan,
Senior Retail Coordinator



Nur Insyirah Binte
Amza,
Retail Coordinator



Lawrence Cheng Sai
Him,
Deputy Director



Miao Xin,
Senior Assistant Manager

NUHS Get Rid of “Stupid” Stuff Success Story