

## Increasing efficiency in Laboratory Stock and Inventory Management

Purchasing and inventory management is a crucial and essential component of quality management in a laboratory system. Managing inventory in the lab can be a challenging task. It remains one of the single most effective ways to reduce costs and improve productivity, although it can be easily forgotten. As a Project Coordinator at the International Foundation against Infectious Diseases in Nigeria (IFAIN), Dr. Theresa Ajose, is aware of the disruptive effect of poor laboratory purchasing and inventory management in the execution of public health research programs.

Many laboratories manage their lab inventory data first on paper forms before transferring to a spreadsheet. This method duplicates efforts and leads to several errors. More importantly, labs lose valuable man-hours that could be spent on actual laboratory research procedures.

*"We have a large network of labs and managing their stock levels is a huge task. Paper forms and spreadsheets could not help me capture all the information and track records efficiently. Apart from frequently monitoring the availability of supplies and reagents in stock, we need to monitor their expiration dates. You cannot do this effectively using paper records"*

Another problem associated with paper-based inventory management is that it does not support continuous information tracking. In 2017, eHealth Africa presented Odoo, an enterprise resource planning system for effective and efficient laboratory inventory management, to IFAIN. This system completely eliminates the paper-based system by allowing the monitoring of stock levels in real-time. eHealth Africa deployed the application, trained project coordinators and lab staff to use Odoo and developed a user guide to facilitate the adoption of the application. eHA also provides regular technical support to users if they encounter any challenges.

The introduction of Odoo completely changed inventory management at IFAIN. Requisition for laboratory consumables became easier and more coordinated because the inventory manager can determine reagent and stock levels in only a few minutes. IFAIN is better able to monitor the use and storage of reagents and supplies to prevent wastage or damage.

*"Odoo has really improved our inventory management; we are now able to maintain more detailed and useful records of all incoming and outgoing supplies across all our labs. High-quality reagents are obtained at an appropriate cost because there are no longer unplanned purchases."*

Using Odoo, IFAIN has been able to drop the number of unplanned purchases and this has positively impacted on their use of funds. Efficient and cost-effective laboratory operations require the uninterrupted availability of reagents, supplies, and services. An inability to test, even for a short time, could negatively affect the results of any research.

eHealth Africa is passionate about improving data management especially in the field of Laboratory and diagnostics, one of our focus areas.

*"Odoo inventory management system in our experience has been very helpful. We recommend its use in other laboratories or similar work settings"*

**80%** Turn around time for supplies and reagent requisition dropped by 80%

**90%** Reagents and supplies stock-outs have reduced by 90%