

# Enhancing Pharmacotherapy in a Rural Hospital in Uganda: A Quality Improvement Initiative

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## What was done?

A comprehensive review of the hospital drug formulary (HDF) in a rural Ugandan hospital was conducted to optimise pharmacotherapy and improve local access to essential medicines. This involved:

- ✓ Assessing adherence levels to the HDF
- ✓ Identifying therapeutic needs
- ✓ Evaluating drug availability

## Why was it done?

The goal of this initiative was to address challenges faced in medicine management at the hospital:

- ✓ Low adherence to the HDF
- ✓ Presence of not listed medicines

These issues hindered effective treatment options and highlighted the need to improve compliance with national guidelines.

## How was it done?

A mixed-methods approach (qualitative and quantitative data) was used to identify **key indicators**:

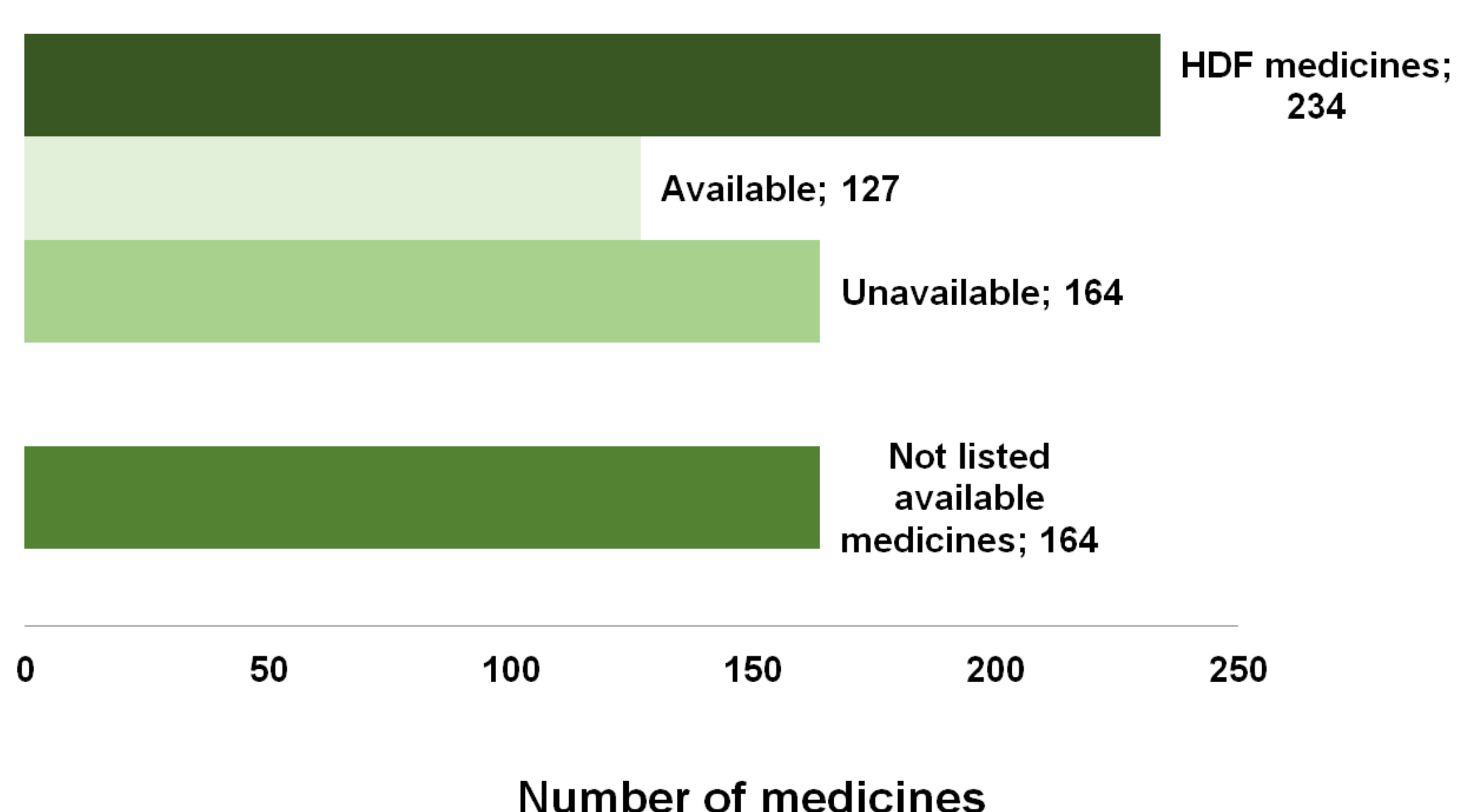
Comparison of available medicines with those listed in the current HDF (published 2016)	<ul style="list-style-type: none"> <li>✓ Adherence to HDF</li> <li>✓ Number of available medicines not included in the HDF</li> </ul>
Comparison of the HDF with the 2023 Ugandan Clinical Guidelines and the Essential Medicines and Health Supplies List for Uganda	<ul style="list-style-type: none"> <li>✓ Number of potential therapeutic gaps</li> </ul>
Interviews with the Service responsible pharmacist	<ul style="list-style-type: none"> <li>✓ Causes of medicine shortages</li> </ul>

## What has been achieved?

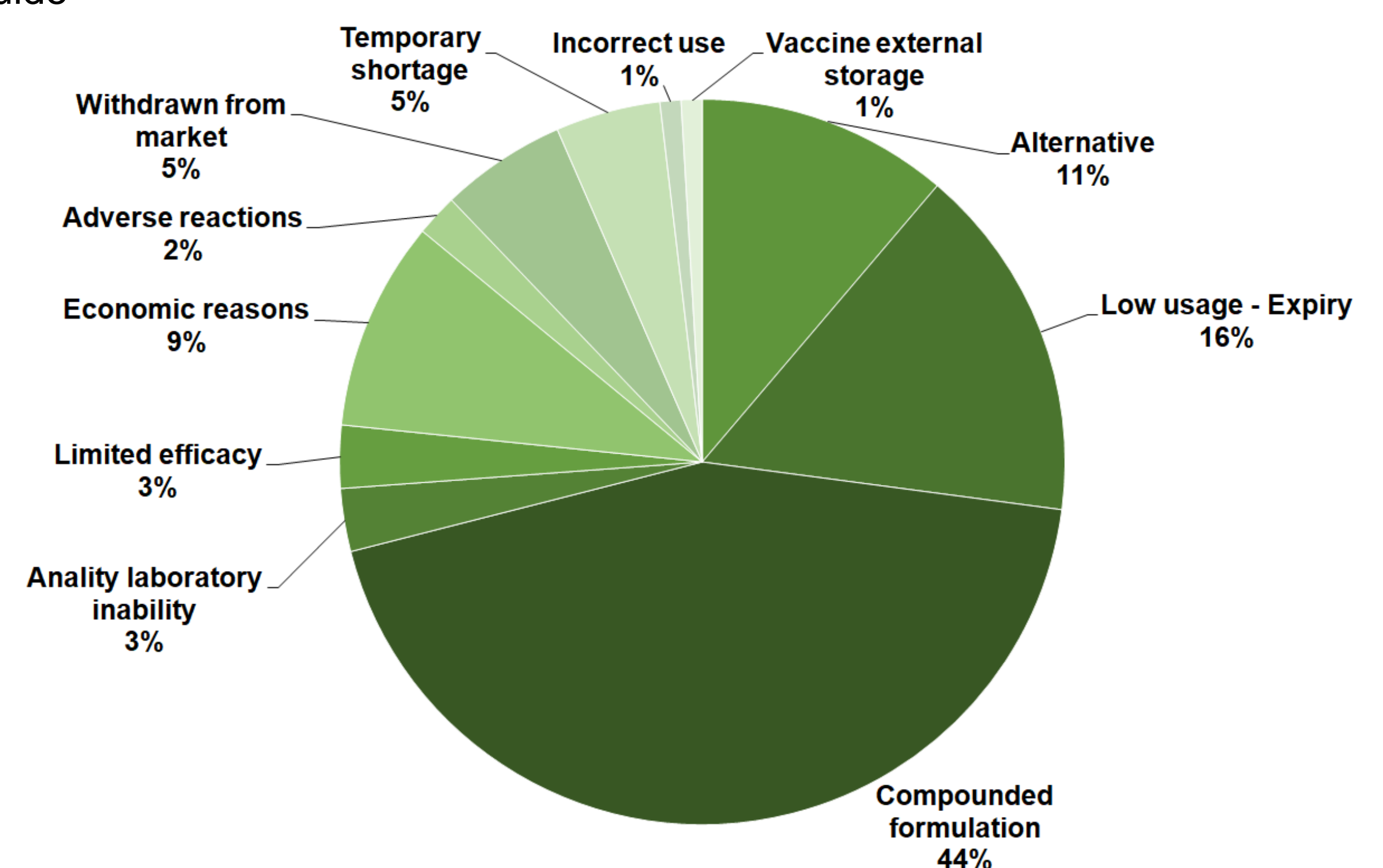
This initiative provided a clear picture of the severity and causes of the issues related to access to medications. Out of 234 medications listed in the HDF, only 127 (54%) were available, while 107 (46%) were out of stock.

- ✓ **Adherence to the HDF** (considering alternatives): **63%**
- ✓ **Number of available medicines not listed in the HDF:** **164**
- ✓ **Number of potential therapeutic gaps:** **99**
- ✓ **Main reasons of medicines shortages:**
  - ✓ Discontinuation of compounded drugs preparation
  - ✓ Expiry of medicines due to low usage

Graph 1 – HDF listed medicines vs. availability bar chart.



Graph 2 - Distribution of the reasons for the unavailability of medicines included in the guide



## What next?

To address these challenges we recommend:

- ✓ Implementing staff training in medication management
- ✓ Systematising stock and ordering processes
- ✓ Updating the HDF based on clinical and economic criteria
- ✓ Reactivating the compounding laboratory

With these measures we aim to improve medication availability and ensure better patient outcomes in this rural hospital.

Additionally, the method employed can be standardised as a valid approach to assess drug availability in any hospital, with particular relevance in low-resource countries facing economic challenges and lacking electronic inventory control systems.

