Standardization of Laboratory Testing Policies Supports HIV and AIDS Program Scale Up

Scale up of HIV treatment has highlighted the need to improve laboratory services.

Laboratory services are the cornerstone of a comprehensive HIV and AIDS program. These include:
- Diagnosis of HIV, STIs, TB, and OIs
- Baseline laboratory investigations for ART
- Monitoring response to ART and detecting toxicities.

Non-standardized laboratory services complicate management because:
- Each laboratory testing technique and type of equipment require different reagents and consumables.

The Standardization Process

What should be standardized?
For each level of the system, need to standardize—
- Test menus
- Test techniques
- Operating procedures
- Laboratory equipment for each type of test.

Who should be involved?
Stakeholders representing all levels of the health system, including laboratory staff and managers.

Steps in Standardization

1. Gather information from all facilities across all levels.
2. Assess existing test menus, techniques, standard operating procedures, and equipment by level.
3. Hold consensus building workshop with stakeholders from all levels.
4. Update standard equipment list and standard operating procedures.
5. Disseminate and implement standards to all facilities across all levels.

Benefits of Standardization
- Efficiency in training and management of staff
- Quality assurance by increasing reliability and consistency of test results
- Affordability through economies of scale
- Manageable supply chain by streamlining the range of laboratory products
- Rational decision making in product selection, forecasting, quantification, and procurement
- Agile supply chain allowing redistribution of supplies to reduce stock imbalances.

Challenges of Standardization
- Rapidly changing technology
- Reaching consensus among stakeholders
- Changing provider behavior to comply with new standards
- Allocating time and resources to implement transition plan.

Recommendations for Standardization
- Make process collaborative.
- Include defined test techniques and instrumentation by level.
- Enforce new standards through the national laboratory policy.
- Ensure that all donations comply with new standards.
- Address potential barriers to implementation in transition plan.
- Review and update standard operating procedures regularly.

Country Example: Kenya and Zambia

- Achieved significant reduction in number of lab supplies.
  - National laboratory inventory in Kenya was reduced from over 3,000 items to less than 300.
- Simplified national training needs.
- Maximized use of limited resources by reducing the number of products in the supply chain.
- Provided a basis for establishing an external QA program.

![Graph showing the reduction in number of lab supplies in Kenya and Zambia](graph.png)