

PROJECT SUMMARY

Background

- At least half of the world population cannot access health services
- Kenya's is currently piloting UHC launched as one of the big four Agenda
- Drug supply management is an essential component of effective healthcare services globally
- UHC success in Kenya, requires a robust LMIS in the counties

Objective

- To establish the influence of Selection support systems as an enabler of universal health coverage implementation
- To establish the influence of Procurement support systems as an enabler of universal health coverage implementation
- To establish the influence of Distribution Support systems as an enabler of universal health coverage implementation
- To establish the influence of Utility support systems as an enabler of universal health coverage implementation

Justification

- Universal health coverage (UHC) is about ensuring that people have access to the health care they need without suffering financial hardship. Under UHC, citizens are assured of access to quality health services regardless of the socioeconomic status.
- Access to quality pharmaceuticals is one key factor to successful implementation of UHC.
- Development and implementation of a robust LMIS is key to ensuring access to quality medicine.
- While there are plans to roll out UHC in all the 47 counties in Kenya, there are no functional LMIS in all the Counties to ensure access to quality medicines.
- The results from this study will help Nyamira County to improve supply of essential medicines to support delivery of quality essential health services under the UHC programme.

CONCEPTUAL FRAMEWORK OF LMIS DEVELOPMENT

- ASSESSMENT-** Challenges in pharmaceutical commodity supply chain
- INPUT-** Design and implementation of robust LMIS to address identified challenges
- OUTPUT-** Improved selection, procurement, distribution and use
- OUTCOME-** Improved access to quality health services under UHC

SUMMARIZE MAIN QUESTIONS AND RESULTS HERE WITH FIGURES ETC

Research Questions

- How is Pharmaceutical Commodity Supply Chain Logistics currently organized in Nyamira County and what are the challenges?
- What is the design of a Logistics Management Information System (LMIS) that would address these challenges and facilitate the implementation of UHC in Nyamira County?

Universal Health Coverage Framework Questions

- Who should be covered?
- Which services are covered?
- Who is paying for the services?

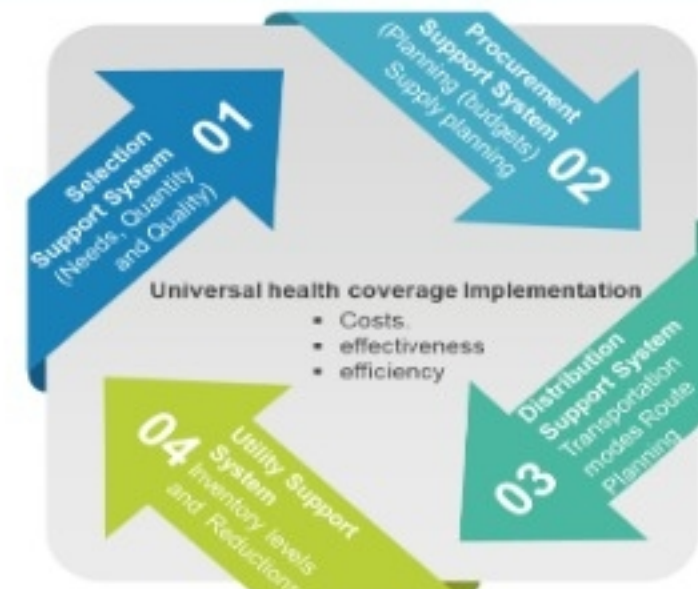
Approaches

- Mixed Research design (qualitative and quantitative
- Population – 12 health facilities in Nyamira
- Sampling – purposive sampling was done, 74 respondents were sampled
- Data collection - Questionnaire
- Data analysis - SPSS, multiple regression model
- $Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + u$
Where:
- Y = Universal health coverage implementation
- α = Constant
- Term β_1 , β_2 , β_3 , and β_4 = Regression coefficients of the independent variables (for Selection support system, Procurement support system, Distribution support system and Utility support system respectively)

Results

- 74 questionnaires 68 responses (92% response rate)
- Overall reliability for all statistics for all items was 0.802
- There is linear relationship between the dependent and the independent variables
- 38% were in agreement that there is a logistics system
- 52% disagree on the presence of a county drug selection policy
- 69% disagree on the use of consumption data for forecasting
- 72% disagree that prescribing practices are monitored and compared with standard treatment guidelines

CONCEPTUAL FRAMEWORK



DUMMY LMIS DESIGN



SOFTWARE FEATURES

Procurement

- Ability to quantify using dispensing/consumption data
- Ability to add new facilities into the system
- Ability to add new drugs to the system both generics and branded products
- Ability to modify different strengths of the same drug
- Ability to give quantification history which is important in procurement planning
- The software is open source

Data Group	Data Items
Logistics system	Reporting/delivery period (monthly, quarterly, or other)
	Number of periods to use in calculating average monthly consumption
	Unit of measure (English or metric)
Facilities	Facility name
	Facility address
	Contact person
	Facility type
	Supplying facility
	Distribution role (warehouse or service delivery point)
Facility types	Facility type name
	Maximum and minimum months of stock
Products	Product name
	Product category
	Dispensing unit
Summary logistics reports	Report name
	Reporting period
	Facility reporting
	Opening balance (optional)
	Stock on hand
	Issues/quantity dispensed to users
	Receipts
	Losses and adjustments

CONCLUSIONS, CONTRIBUTIONS

- Pharmaceutical selection policies need to be adhered to
- Under procurement, forecasting data should be based on drugs dispensed user data
- There needs to be a policy on redistribution and inventory control
- STGs need to be adhered to.