# Analysing Routinely collected data

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### Presentations by

- Werner Maokola: TB diagnosis in PLHIV from CTC
- Christopher Rentsch: Introducing record linkage
- Gregory Kibadi: Estimating implementation strength from routinely collected data

## Routinely collected health data

- All countries require health facilities to collect routine data on the delivery of their services (Health Management Information Systems)
- Aggregated monthly totals, or electronic patient records
  - Monthly totals of people receiving services
  - Outcomes (admissions, discharges, deaths, lab results)
  - Patient records and
- Individual level patient records
  - Available for some vertical programmes
  - Selected clinics may have electronic records
- Question: How can this information be used to improved health services?

### Current use of routine data

- Mostly describing what is happening (descriptive statistics)
- Monitoring and evaluation
- Preparing indices for national and international comparison

	Indicator	EXPLANATION	RESULTS UPDATE: 1156 out of 6216 = 18.6%	
1	Percentage of health facilities that offer ART (UA)	From National database		
			Adults	Children
2	Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy(UNGASS)	Estimates for adults and children in 2011	54.5%	31.3%
3	Percentage of adults and children with HIV known to be on treatment 12 months after initiation antiretroviral therapy(UNGASS)	Estimated for 3 yearly cohorts (2008, 2009 and 2010).	2008- <b>74%</b> 2009- <b>74%</b> 2010- <b>74%</b>	2008- <b>81</b> % 2009- <b>80</b> % 2010- <b>78</b> %
4	Percentage of adults and children with HIV known to be on treatment 24 months after initiation anticotroviral thoragy (IIA)	Estimated for three yearly cohorts (2007, 2008 and	2007-65% 2008-65%	2007-72% 2008-72%

### International expectations

- International Health Partnership (IHP+)
- Harmonized and coordinated data across health sector
  - Common country platform for Monitoring and Evaluation
- Integrated health planning and assessment
  - Shared systematic approach to strengths and weaknesses
- Increased transparency and accountability
  - Engagement of partners and society in the process
  - Enable verification of the indices, monitoring and evaluation
- Linking data across reporting mechanisms

## Routinely collected data in Tanzania

- Census, household surveys, economic and other surveys (BoS)
- HMIS aggregated data from health facilities across Tanzania
- Regular routine surveys eg SARA
- Programme specific data
  - Malaria, TB, PMTCT, and other vertical programmes
- Individual level data, leading to electronic patient records (?)
  - Example = CTC records from ~500 health facilities

### Analysis of routinely collected data

- Link different data from HMIS, census and other sources
  - For assessment of progress within regions/districts
  - For comparison of interventions
- Analysis of routinely collected individual data
  - Utilising the information in the Care and Treatment clinic database
  - Building resources and tools, and disseminating results
- Linking routine clinic data to population research data
  - In specific populations where research is undertaken
  - Research data can be linked to routine data in the clinic to answer further research questions

## Potential value and output in Tanzania

- Secondary use of routinely collected data
  - Move the analysis from descriptive to explanation of health indicators
- Use the data to answer questions needed by policy makers & planners
  - On access to services
  - To explain success (and failure) of interventions.
  - Build better services
- Develop and validate tools that can be used across the country
- Enable people to analyse and use data themselves