



# GLOBAL IMMUNIZATION MEETING 2018



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KIGALI, RWANDA

# Whose data is it anyway?

## Empowering health workers for immunization data analysis and use

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Session 2C: Best practices in technical assistance to countries

# Challenge: How to improve data quality at the input level (i.e. Health Facility)?

- Need situational analyses with countries on what already working & what to update/revise
- Build on existing tools, resources and approaches
  - including strengthening use and capacities to triangulate EPI administrative data that health facility staff are using
- Incorporate innovation and human-centered design *with* health workers, caregivers, communities at the facilities
  - peer learning and exchange; less top-down
- Adult learning & data culture - a process, not a pilot



Photo: Miandriavazo, Madagascar (2006), JSI/Lora Shimp

# Utilize blended strategies for adult learning and capacity building

**JSI**

## **BRICKS**

**Building Routine Immunization  
Capacity, Knowledge & Skills**

### **EPI CORE COMPETENCIES**

- Job descriptions (requirements and skills, including pre-service)
- Job performance measurement and expectations
- Quality improvement
- Team roles and responsibilities

### **SITUATION ASSESSMENT**

(Identify needs, prioritize, and ensure support)

- Organized around RED components
- Incorporates equity and REC-QI to sustainably serve un/under-vaccinated
- Root cause analysis in the field
- Internal (and external) field assessment, with correction of gaps on site

### **SUPPORTIVE SUPERVISION**

- Qualified supervisors
- Track recommendation between visits
- Facilitated performance improvement
- Key immunization indicators (particularly if integrated supervision)

### **REVIEW MEETINGS**

- Monthly/quarterly data review and dialogue (based on trend analysis)
- Peer-learning and exchange
- Small, do-able actions for systems and program improvements

### **APPLIED TRAINING (on job and coaching)**

- Qualified coaches/mentors
- Skills in locally-generated data triangulation and use
- Self-learning, self-assessment, and competency-based
- Need-based, practical training (on-job, classroom and hands-on)

**BRICKS:** [http://www.jsi.com/JSIInternet/Inc/Common/download\\_pub.cfm?id=17119&lid=3](http://www.jsi.com/JSIInternet/Inc/Common/download_pub.cfm?id=17119&lid=3)

# Immunization data challenges in 11 countries

(identified in 2016 by MCSP/JSI country staff with EPIs and partners)

Perceived reasons for the generation and reporting of low quality RI data by health facilities

	Haiti	Kenya	Liberia	Madagascar	Malawi	Mozambique	Nigeria	Pakistan	Tanzania	Uganda	Zimbabwe	Total
Lack of reliable denominator												11
Stockout of tools												6
Motivation/training of HWs/hard to change behavior												6
Lack of understanding of importance of value of reporting/monitoring												7
Human resource constraints, lack of job aides												3
Lack of supervision and feedback mechanism												2
Multiple reporting forms and lack of harmonized tools												3
Different data capturing mechanisms such as DVDM/DHIS2												1
Misunderstood expectations												2
Lack of maps of catchment areas												2

# Objective: Provide technical support with EPI and partners in-countries to improve immunization data and use

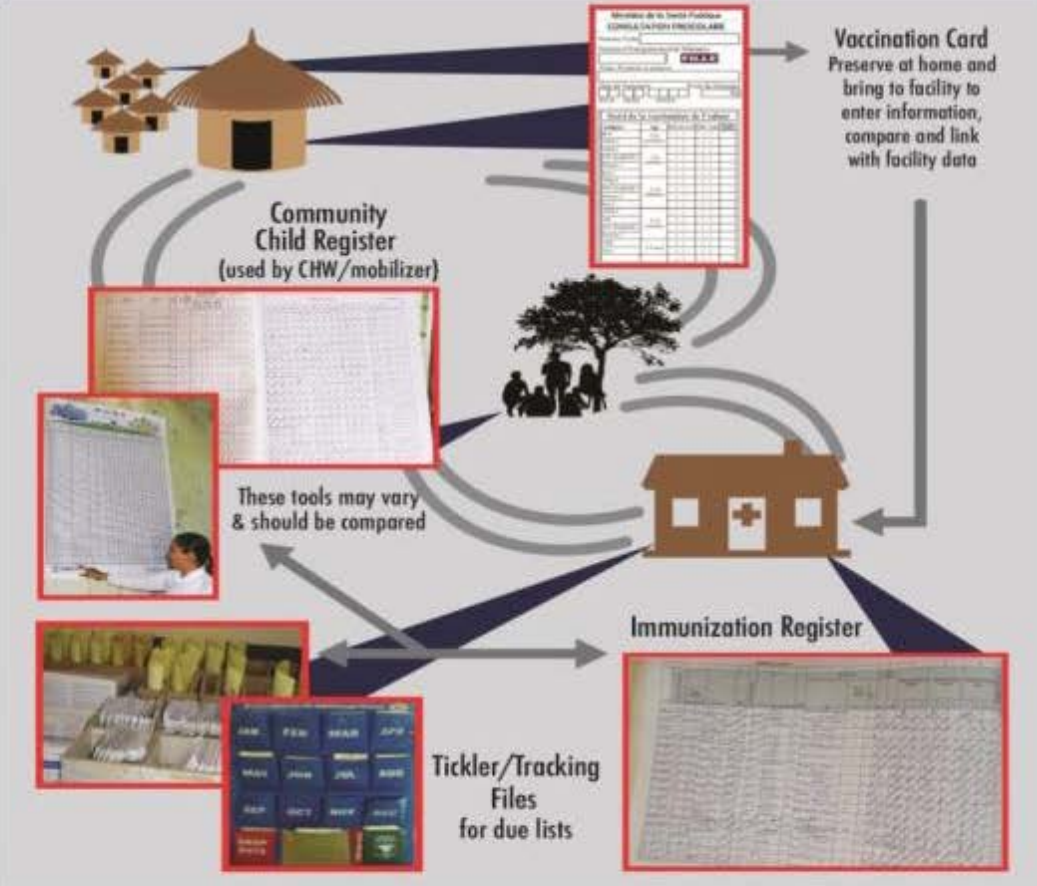
Help countries adapt and use existing tools and strengthen their immunization data plans and activities:

- Orient and update application of RED guidance
- Implement Data Quality Improvement Plans
- Utilize opportunities for data share (review meetings, mentoring, WhatsApp groups, supervision, etc)
- Incorporate data use into microplanning and budgeting
- Emphasize immunization data in trainings, monitoring and in pre-service

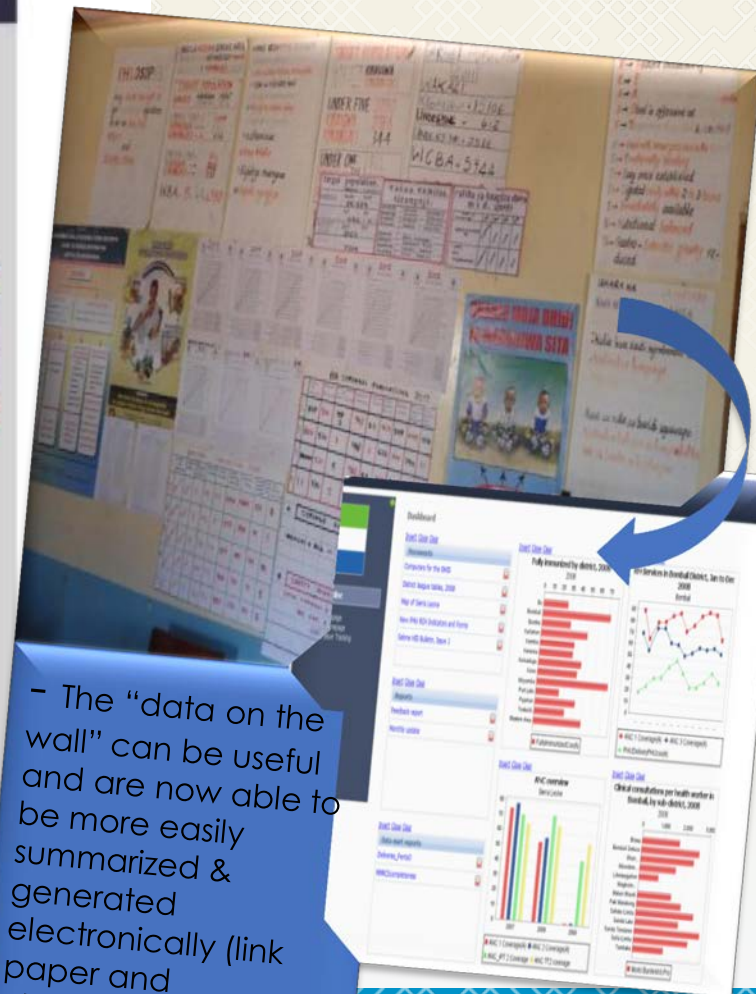
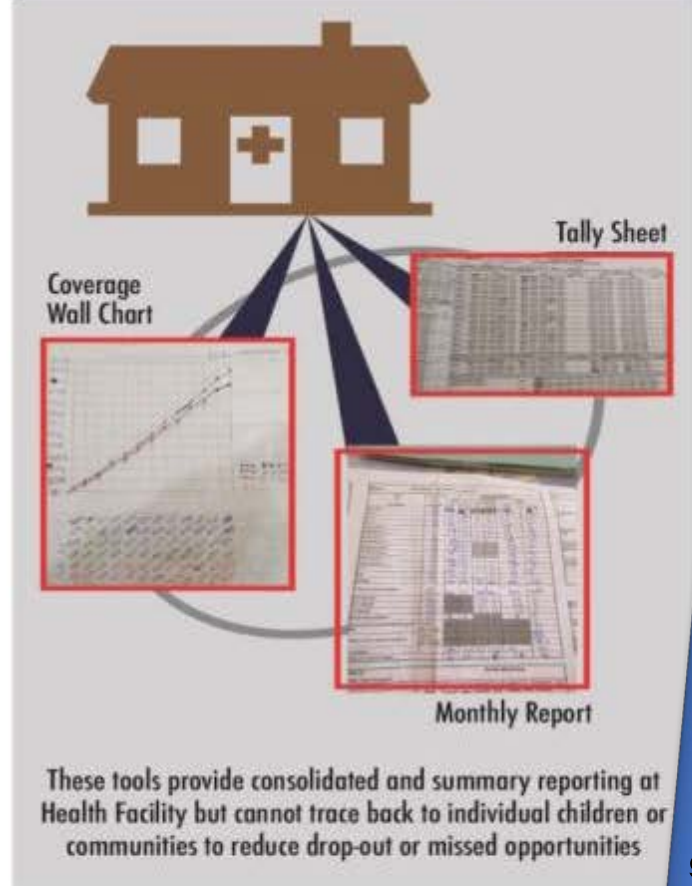


# Data triangulation – comparing name-based and number-based tools

## Name-Based (unique identifier for each child)



## Number-Based (for tallying/reporting; no unique identifiers)

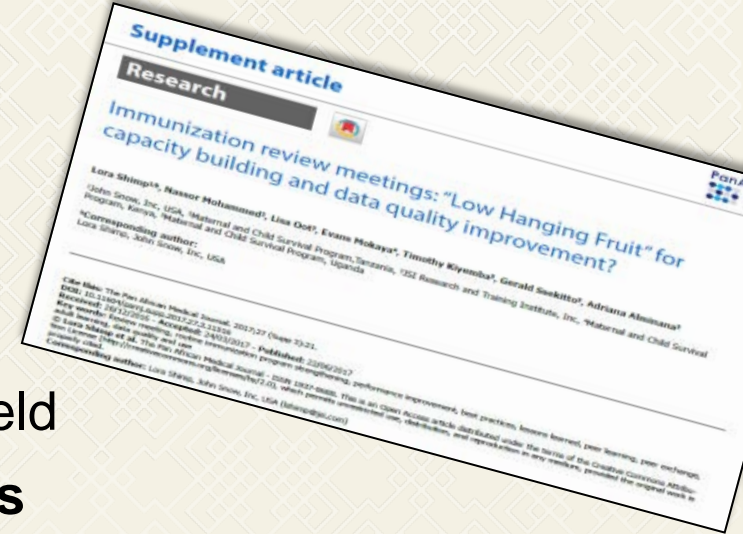


- The "data on the wall" can be useful and are now able to be more easily summarized & generated electronically (link paper and electronic; archive)  
- Tanzania

Photo: Dr. Lyimo Dafrossa, Tanzania IVD

# Technical assistance provided – hybrid (no “one size fits all”)

1. **Review meetings** – to ensure (1) exchange between data users at all levels and (2) actionable outcomes and program adjustments in the field
2. **Comparison and use of data between health workers & mobilizers** – tickler files; job aids; community registers linked with HF register; “my village, my home” – mobilizer tracking tool;
3. **Pre-service curriculum** – change mindset for data emphasis; ensure capacity base that can be reinforced and monitored through in-service
4. **Maternal and child tracking systems and electronic/paper immunization registers** (computerized and with unique identifiers; can generate due lists and data at facility level)
5. **Standardize tools, dashboards and key indicators** – between new and old versions; computerized vs paper-based tracking (are all tools needed, consistent, and forms/technology funded and stocked?)

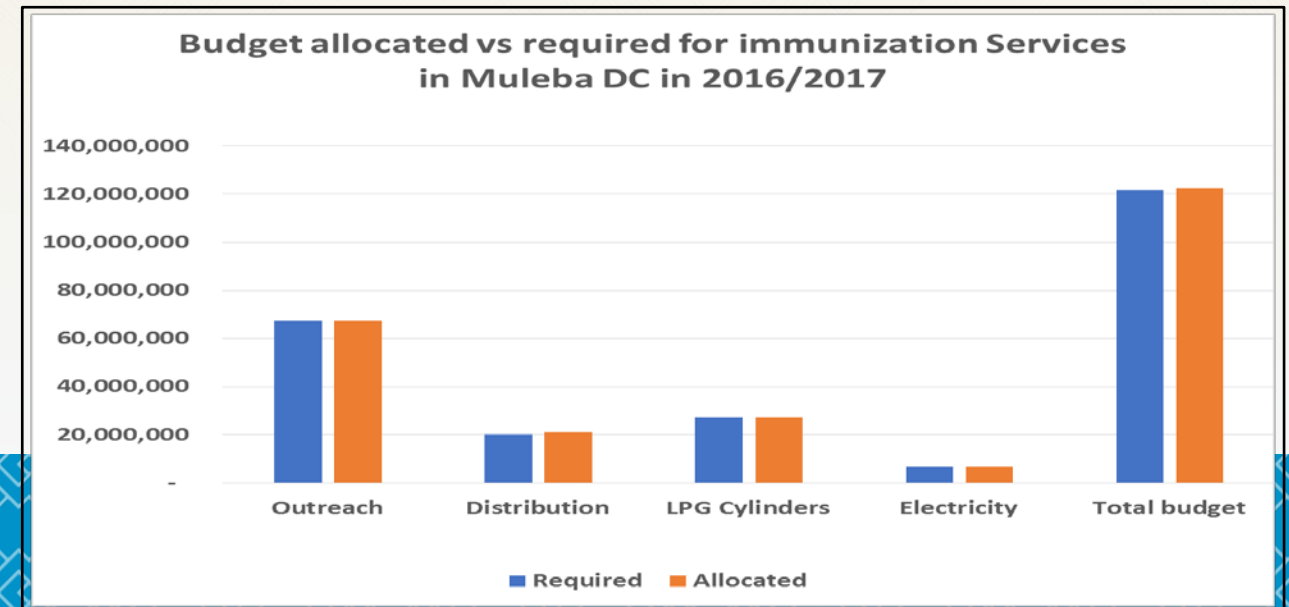
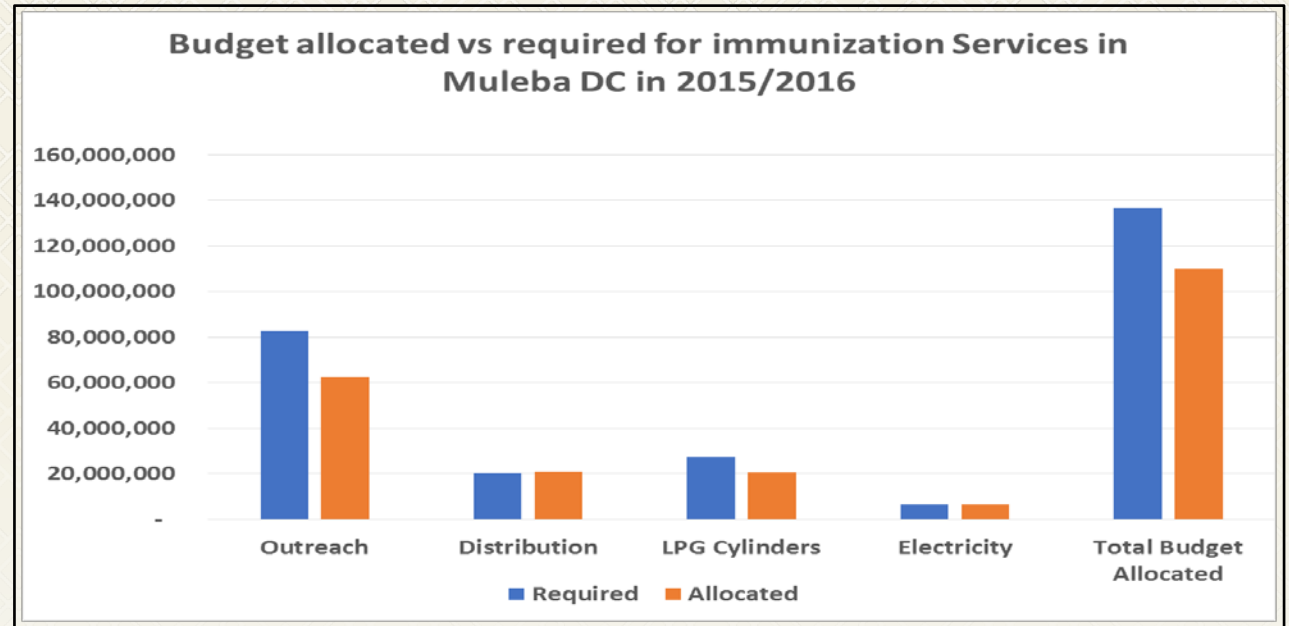
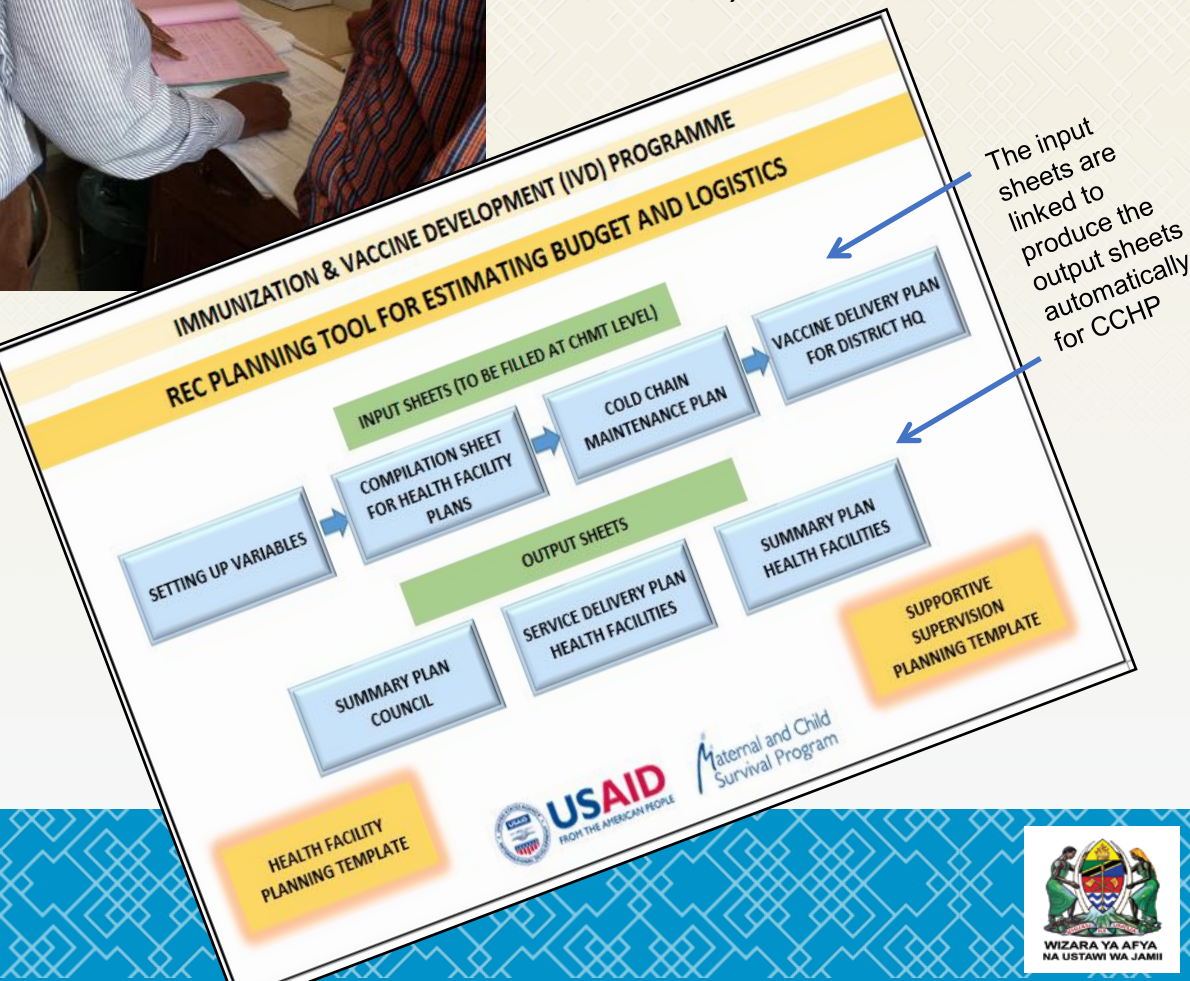


Summarized inputs from field staff from: Ethiopia, India, Kenya, Madagascar, Malawi, Nepal, Pakistan, S. Sudan, Tanzania, Uganda, Zimbabwe



# Link data with planning and costing

User-friendly Excel and Access-based tool for district and health facility planning and costing (example from Tanzania)



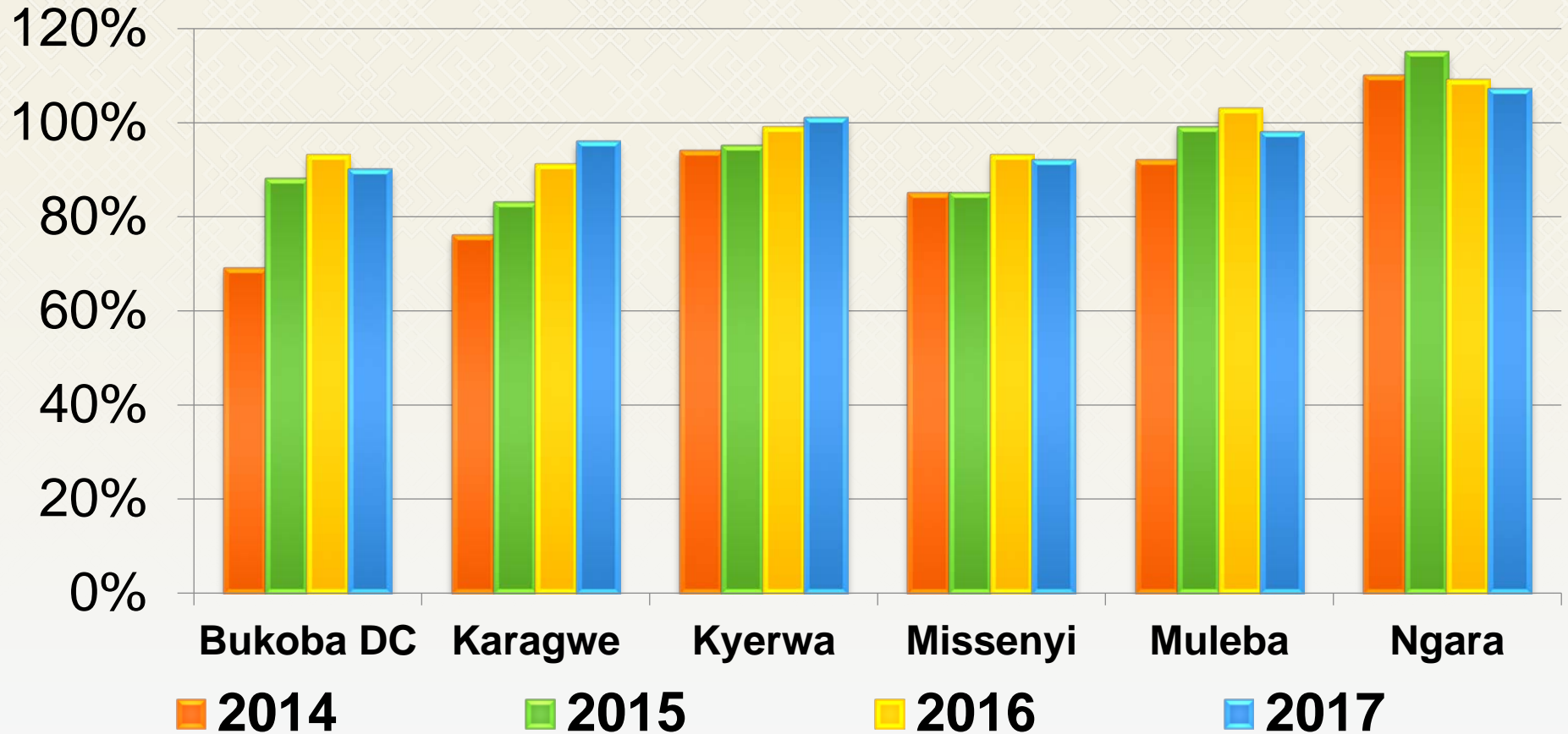
# Country trend analysis: Tanzania example

## DTP-HepB-Hib-3 (penta3) Coverage: 5 districts, Tanzania

(source: routine administrative data)

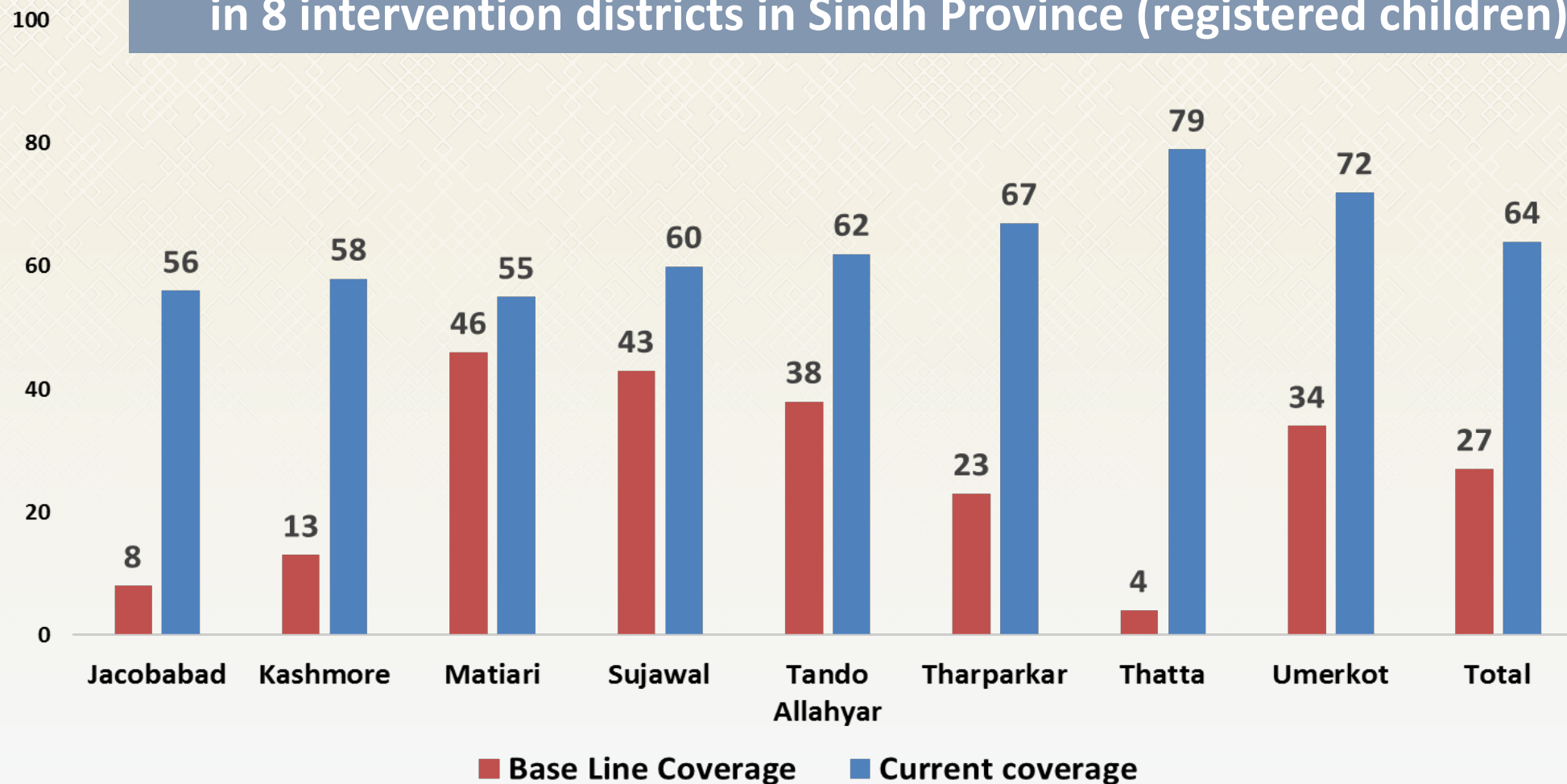
These districts represented 40% of the under-vaccinated in 2014

Use and quality of RI and costing data identified as gaps and addressed through district and HF capacity building



# Country trend analysis: Pakistan example

% Penta 3 Coverage at baseline and end project (31 Aug 2017)  
in 8 intervention districts in Sindh Province (registered children)\*



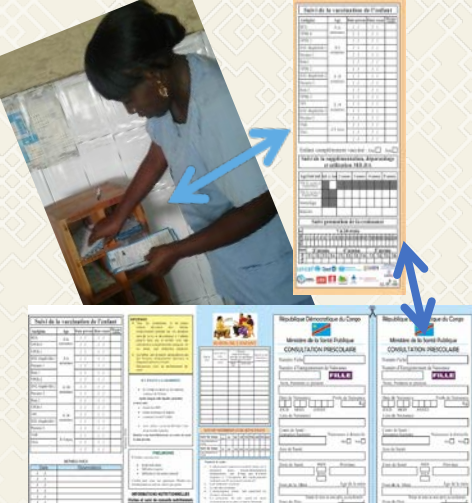
## PEI and EPI synergies

Source for baseline:  
HSS/RSPN 4 districts, May,  
2014. MCHIP 3 Districts:  
May, 2016, RSPN/MIS

For current coverage:  
MCHIP/MIS

\* Sujawal: baseline  
done in May 2014, but  
vaccination could not  
start under HSS.  
MCHIP support began  
in Sept 2016.

## Innovation (DR Congo): Use of child health card & mobile phone calendar reminders - to reduce defaulters



- 1) Situational analysis, MOV assessment, process monitoring, and rapid convenience sampling
- 2) Focus in 2 Health Zones in Kinshasa (total of 35 HZs in Kinshasa, with estimated 41,740 under-vaccinated with penta3 in 2016)
- 3) Link with RVV introduction, Kinshasa urban immunization strategy, DQIP
- 4) Revised child health card with detachable piece used at HF for defaulter tracking (see photo)
- 5) Trained nurses (in 5 HCs) & mothers of 0-6 month olds to use: (a) cards & (b) mobile phone electronic calendars for session reminder alerts at each session (4 month rapid study, 2017)
- 6) Approx 4374 additional infants vaccinated with penta3 in 2017 in 2 HZs
- 7) Challenges:
  - a) Different levels of understanding on how to use electronic calendar
  - b) Requires practice and monitoring

Data collected - rapid « endline » sample	#	%
Women interviewed who had card	129	100%
Women trained to use the telephone calendar	86	66,6%
Women who used the telephone calendar to return for vaccination	55	42,6%
Women who continued to use the telephone calendar at time of survey	45	52.3% (of women trained )
Women having been visited by a community mobilizer	25	19,3%

Recommendations from mothers interviewed: Call them (62,7%), train other women in using the phone calendar (41,8%), send them an SMS reminder (29%).



# Lessons learned: What is required to expand & institutionalize effective practices in data quality and use?

1. Review data collection tools and tailor use at different levels
  - a) Process monitoring: DQSA, peer exchange in review meetings, on-site discussion and correction, in training and pre-service
  - b) Ensure tools available, user-friendly and action-oriented (are all data needed? Inconsistencies? Forms funded and stocked?)
2. Standardize tools – between new and old versions; computerized vs paper-based tracking
3. Revise tools and prioritize key indicators (e.g. process indicators; RI dashboard; EPI Score Card with HMIS; link mapping, drop-out, DQS)
4. Simplify registers (small book, able to be used for outreach, link with monthly reporting)
5. Ensure unique identifier (e.g. number, birthdate, name) for each child, also linked with immunization/child health card & register



Malawi supervision  
(photo: Hannah Hausi)



IMPACT team, Kenya  
(photo: Amos Chweya)

# Follow up actions – sustainability of TA

- Link with country's own capacity building plans –
  - in-service data use
  - pre-service: standardized immunization curriculum for all medical & training institutes; agreed data competencies (e.g. exit exams)
- Ensure quality data & technology savvy –
  - follow up review meetings and supportive supervision;
  - “professionalize” data managers (e.g. statisticians, build analytical and managerial capacity, technology skills);
  - EPIs and partners to appreciate good and consistent data performance (certificates, exchange visits, asset-based review/learning) and incorporate in HSS, PBF, etc
- Supply chain – link stock management data, e.g. VIMS
- Community – build HW and mobilizer capacity to compare and use data, linked with RED/REC



CHW Manicaland, Zimbabwe  
(photo: Coscar Zvamashakwe)

