



#### BLN Webinar on "Piloting the E-Tracker App in DHIS2 in The Gambia"

Speaker: Mr. Mbye Njie, EPI, Ministry of Health and Social Welfare, The Gambia

Host: Catherine Muyawala, Community Coordinator, BLN





#### BACKGROUND ON THE BID REGIONAL MENTORS





# **BID Regional Mentors**

- The BID Initiative has transitioned to BID Regional;
- To provide targeted technical support African countries investing or interested in data quality and use interventions for improved coverage of immunization;
- BID Regional will pair countries with technical advisors experienced in:
  - Electronic Immunization Registries (EIRs);
  - Change Management strategies; and
  - Data-use culture building tools.





## THE BID LEARNING NETWORK





# The BID Learning Network

- BLN will remain a:
  - Conduit of learning and sharing of experiences for peers, partners, donors and technical experts;
  - Platform for information exchange & technical resource sharing, peer-to-peer interaction and exchange of promising practices;
  - Platform that connects innovations coming out of implementation activities to country managers and professionals that need to be aware of these advancements for improved health program outputs; and
     Platform that brings like minds together to brainstorm matters of mutual interest that contribute to better health outcomes





### **"PILOTING THE E-TRACKER APP IN DHIS IN THE GAMBIA"**





#### Introducing our Speaker: Mbye Njie



- Public Health Specialist with 18 years experience;
- Focus on immunization, disease surveillance and other public health-related activities;
- Divisional Vector Control Officer (2006);
- Senior Malaria Control Officer (2011 2012);
- STOP Program Consultant in Nigeria (2013 to 2014);



#### Introducing the Speaker (cont'd)

- Capacity Building Manager under the Expanded Program on Immunization in The Gambia responsible for strengthening the program and coordinating training activities.
- Currently the Senior VPD Surveillance Officer, Gambia EPI.
- Holds a HND in Public Health, MSc in Public Health Entomology, and certificates in Management Skills for Supervisors and Field Epidemiology



## INTRODUCING THE TOPIC: WHAT YOU WILL LEARN



### Introducing the Topic: What you will learn

□ In this webinar, the speaker will share:

- Gambia's experience with piloting the e-Tracker App in the DHIS2
- Highlights of the process, software applications, accomplishments, challenges and lessons learned
- □ Findings and recommendations from the final evaluation
- This webinar will be of interest to Data Management Specialists, EPI Managers, Health Management Information System (HMIS) Specialists and other health care specialists committed to improving data collection, quality and use across the health system.





# Thank you & connect with us!



bidinitiative.org



bidinitiative.org/blog



facebook.com/bidinitiative



twitter.com/bidinitiative



bidinitiative@path.org



bidinitiative.org/bidlearning-network/ participate/

Visit the website to subscribe to our newsletter.











## Mbye Njie Senior Surveillance Officer Expanded Program on Immunization



# Outline

- Objectives
- Background information of The Gambia
- The process of the Pilot
- The Application
- Accomplishments
- Challenges
- Lessons Learnt
- Evaluation findings

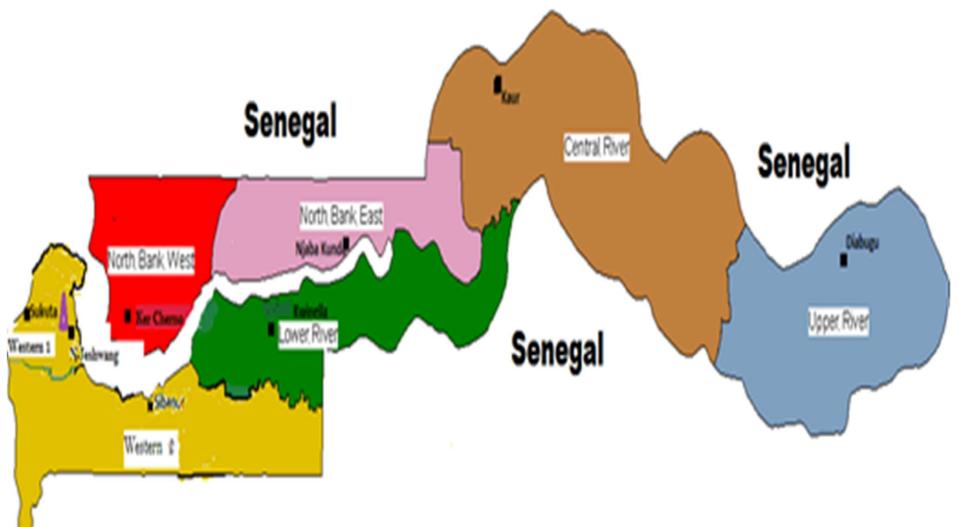


# Objectives

- Understand the process Gambia took in piloting E-Tracker
- Have an insight of the application /software the Gambia is using
- Understand the lessons learnt, challenges and recommendation of the E-Tracker Pilot
- Share the findings of the final evaluation

#### Map of The Gambia Showing Health Regions

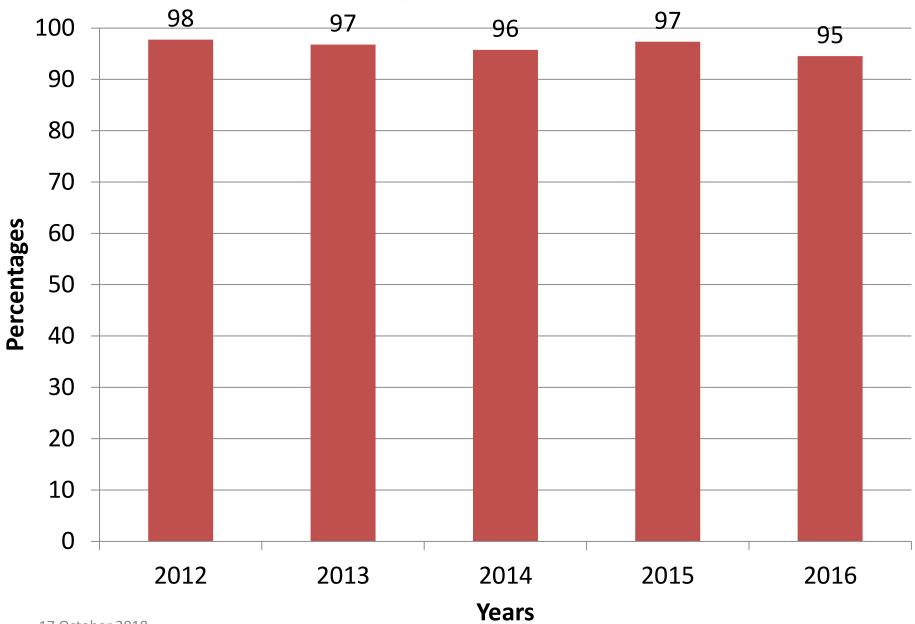




## **Demographic Information**

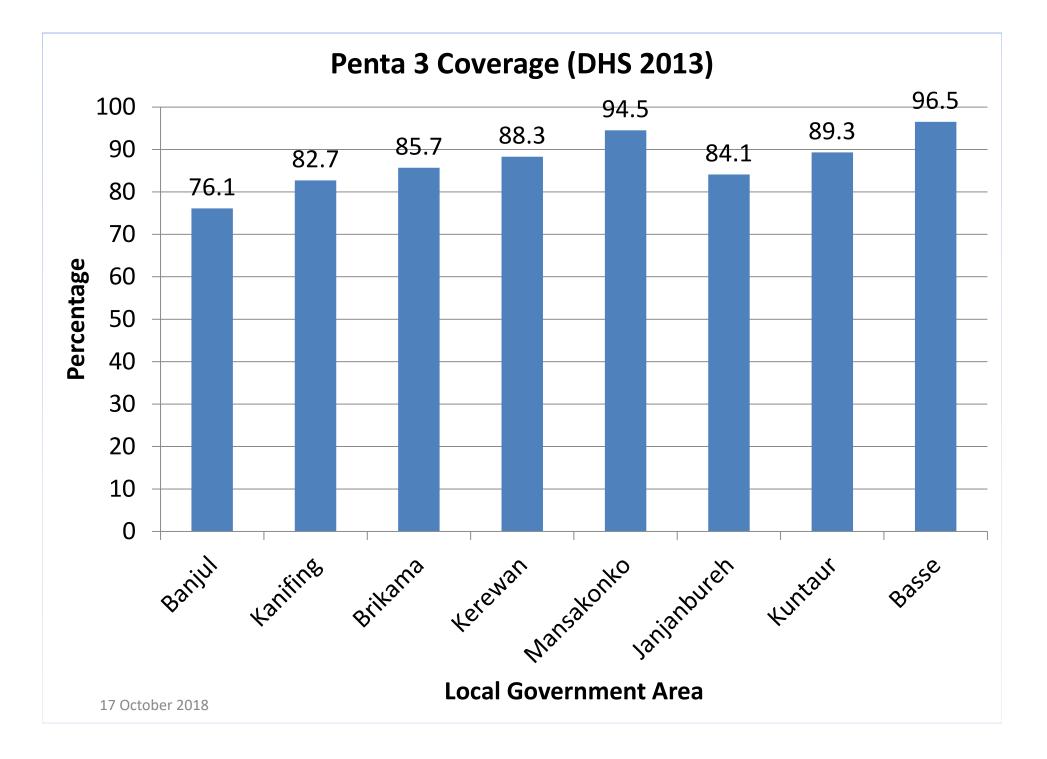


	Total		Surviving	Under 15	Under 5	Pregnant	СВА
Regions	Population	LiveBirths	Infants	Рор	Рор	Women	Women
Western							
Health							
Region 1	812395	32479	30179	365578	194975	32479	178,727
Western							
Health							
Region 2	345506	14256	13392	155478	82921	14256	76,011
North Bank							
West	112111	5669	4712	50450	26907	5669	24,664
North Bank							
East	121369	5635	4734	54616	29129	5635	26,701
Lower River							
Region	82526	4411	4086	37137	19806	4411	18,156
Central							
River							
Region	224361	12996	12396	100962	53847	12996	49,359
Upper River							
Region	233883	13522	12628	105247	56132	13522	51,454
17 October National	<sup>2018</sup> 1932151	88968	82127	869468	463716	88968	<sup>17</sup> <b>425073</b>



#### DPT/Penta 3 coverage in the Gambia 2012-2016

Source: JRF Reports 2018



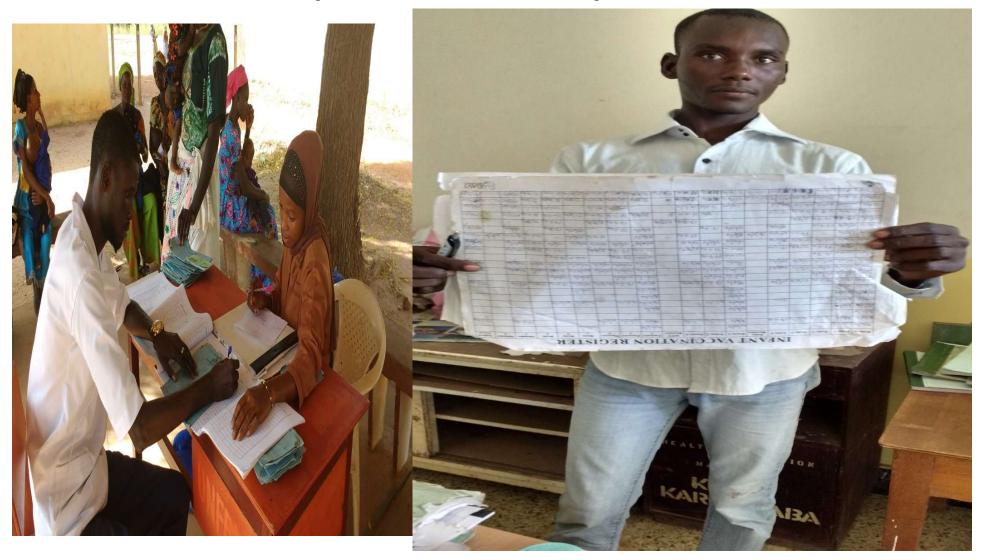


## Process

- The Gambia has been using the District Health Information System (DHIS2) since 2009
- Immunization records are recorded manually at service delivery points
- Monthly returns sent manually/electronically
- Started thinking of better solutions



## Paper-based system





## **Busy RCH sites**



# The Breakthrough



#### BID INITIATIVE

Better data. Better decisions. Better health.



Dakar Meeting in May 2015 Tanzania December 2015 Costa Rica/PAHO EIR meeting Ghana meeting Study visit to VaxTrac Benin Uganda CM meeting **Small Grant Award** 





# **Decision Making**

- National meeting held where HMIS department presented on the Tracker Capture of the DHIS2
- Decision was made to pilot in Western Region
   1 where some facilities have internet and
   DHIS2



## Description

- A component of the DHIS2
- Being piloted in 2 health facilities
- Each immunisation officer has a username
- National and Regional supervisors usernames

## The E-Tracker

dhis2	Gambia Health Information System		Search apps	KS
Registration and Data Entry Reports	<pre></pre>	Type your search criteria here	<b>Q</b> Register	
Western Region 1 Banjul City Council Kanifing Municipal Council Ahmadiya Hospital Ahmed clinic ASB Private Clinic Bafrow Sere Kunda Clinic Bafrow Sere Kunda Clinic Bakau Minor Health Centre Bakoteh Home for Elderly Bundung Maternal Child Health Fajara Barracks Fajara MRC Fajara MRC GFPA Kanifing NGO Clinic GFPA Kanifing NGO Clinic GFPA Kawify	II Enrolling organisation unit Bundung Maternal Child Health Hos	spital		
	entre			
	th Centre Save and continue Save and add new Print for	n Cancel		

dhis2 Gambia Health Infor	mation System		Searc	n apps 🛛 🗰 🔊
Back GMD_Immunisation	Program			<b>4 0 *</b>
Timeline Data Entry		Q 0 = 1 ^ 0	Current selections	^ 0
2017-01-03 2017-03-	07 2017-04-11 2017-05-09	<ul> <li></li> </ul>	Organisation unit	Bundung Maternal Child Health
Bundung Maternal Chi Birth or Later (Completed)	(Open) (Open) (Completed)	+	Program	GMD_Immunisation Program
Report date *	Due date	•	Feedback	× 0
2017-01-03	2017-02-20			
BCG *	⊘ Yes O No		No feedback exist	
HepB *	⊘ Yes O No			
OPV 0 *	⊘ Yes O No		Profile   Edit	^ <u>1</u> 0
Weight_kg *	2.7		EPI R_Number *	JFPH/684/17
Incomplete		Delete Print form	EPI_Date of Registration *	2017-02-20
			EPI_Child Name *	Mamisira Mendy
Your note here		h.	EPI_DOB *	2016-12-31
Add 1-Flear 2018			EPI_Sex *	Female

dhis2 Gambia Health	nformation Syste	em									Search apps		<b>1000</b>
★ ★ → Registration and Data Entry	Tracker c	apture											
Reports	GMD_Immunis	ation Program			<b>X Y</b> Ty	pe your search cri	teria here		•	QF	Register		
Gambia	Total: 2944	*											
Central River Region     Contral River Region     Aver River Region     North Bank East Region     North Bank West Region     Upper River Region	<b>≑</b> Registering unit	Registration date	÷ Inactive	♦ EPI R_Number	♦ EPI_Date of Registration	♦ EPI_Child Name	¢ EPI_DOB	EPI_Place of Delivery	¢ EPI_Sex	¢ EPI_Mother's Name	EPI_Father's Name	♦ EPI_Address (detailed)	\$ EPI_Birth Weight
-Western Region 1 -Heanjul City Council -Kanifing Municipal Council -Ahmadiya Hospital -Ahmed clinic	Bundung Maternal Child Health Hospital	2017-02-20	No	JFPH/684/17	2017-02-20	Mamisira Mendy	2016-12- 31	Health Facility	Female	Jacqueline Correa	Alieu Mendy	Fajikunda Dumos c/o Mendy kunda	2.7
-ASB Private Clinic -Bafrow Sere Kunda Clinic -Bakau Minor Health Centre -Bakoteh Home for Elderly -Bundung Maternal Child Hea	Bundung Maternal Child Health Hospital	2017-04-18	No	JFPH/1914B/17	2017-04-18	EBRIMA SORRIE BAH	2017-04- 14	Health Facility	Male	MARIAMA BAH	ALPHA OMAR BAH	OLD YUNDUM	2.4
-Fajara Barracks -Fajara MRC -Faji Kunda Major Health Centre -GFPA Kanifing NGO Clinic	Bundung Maternal Child Health Hospital	2017-03-29	No	JFPH/709/17	2017-02-20	JARRA MANNEH	2017-02- 17	Health Facility	Female	BINTA MANNEH	SAIKOU MANNEH	BUNDUNG SANNEH KD	3
	Bundung Maternal Child Health Hospital	2017-03-28		JFPH/1450/17	2017-03-28	MUHAMMED LAMIN L.K NJIE	2017-03- 18	Home	Male	KADDY SANYANG	LAMIN B NJIE	BUNDUNG	2.5
	Bundung Maternal Child Health Hospital	2017-02-20		JFPH/702/17	2017-02-20	Abubacarr Touray	2017-02- 08	Health Facility	Male	Isatou Sonko	Abubacarr Touray	Abuko Gamtel c/o touray Kunda	2.7
17 October 2018	Bundung	2017-04-26	No	JFPH/2038/17	2017-04-26	CHERNO	2017-04-	Health	Male	ISATOU	AMADOU BALDEH	BUNDUNG	3.3



# Accomplishments

- Adaptation and Customization
- Procurement of 11 laptops with antivirus and 4 data cards
- Training of health workers and their supervisors
- Orientation of stakeholders
- Successful implementation
- Final Evaluation



## Kemo Sonko at Bundung Maternal and Child Health hospital had this to say...



"Definitely the E-Tracker has added value to the work and has eased the service for us. As of last week, two women came, they lost their cards, what I told them was can I have their children's names and I just punched the names in the system and everything became plain and I have to extract their information from the E-Tracker system to their IWC cards. It was just a click of a button every information was produced. They were amazed and were encouraging others to have patience to get their children registered"

## Challenges



- The use of both manual and the electronic systems in the pilot health facilities
- The issue of internet connection
- Improper handling of devices and low ICT skills
- Frequent staff turnover
- Infrequent supportive supervision

## Lessons Learnt -1



- Highly trained human resource is very vital in implementing any intervention.
  - There is the need to assess the human resource availability and training requirements before implementing such projects.
  - Staff rotation should be minimized where possible
  - regularly train health workers on the DHIS2 and its related applications to build their confidence
- High level stakeholder involvement is very crucial. The orientation of decision makers on the E-Tracker got a positive response from the immunisation decision making body.

## Lessons Learnt -2



- It is important to create a sense of ownership among service providers
- The system should reduce workload for health workers and waiting times for clients
- The use of two systems in a pilot area should be discouraged.
  - The two systems may create undue resistance by health workers as it will not show the efficiency of the new system being promoted. It will rather increase their workload and discourage them in using the new system.

## Lessons Learnt -3



- The platform (Software or application being used for electronic immunisation registry) need to support both online and offline modes
- Prompt reactions to technical issues is required to make the change stick
- Supportive supervision, monitoring and evaluations activities should be incorporated into the budgeting



## FINAL EVALUATION

- Assess user knowledge, attitudes and practices with regard to E-Tracker in the DHIS2 software as well as determine the extent of implementation of E-tracker guidelines.
- Understand best practices and challenges to achieving high and timely immunization coverage reports.
- Assess frequency, timeliness and quality of supervision of Central and regional levels of the participating health facilities on the E-tracker in the DHIS2 pilot.
- Assess country readiness for national rollout and provide an estimated cost.



# Findings 1

- Coverage data captured in the E-Tracker from January 2017 to December 2017 show that both facilities have performed well at 76% for FajiKunda and 62.3% for JFPH
- Health workers demonstrated a good knowledge and skills on the use of the software



# Findings 2

- The lack of reliable internet services have been largely blamed for the underperformance
- Supervision from all levels of the health system has not been as regular and consistent as required



# Findings 3

- The evaluation has conclusively shown that it is possible to undertake a phased out national rollout provided the required resources are made available.
- It is estimated that approximately \$225,000 would be required for the rollout reaching all health facilities in the country.



# Bottlenecks

- System functionality dependant on availability of electricity and internet services,
- Limited bandwidth preventing continuous internet access,
- Limited laptops especially in facilities with large monthly targets for immunisation,
- Data bundles allocated to the two health facilities are not sufficient to last a whole month.

# Short Term Recommendations from the Evaluator



- Treat as urgent shifting from laptops to Tablets and also shift from the online version of the E-Tracker to the offline mode to avoid frequent interruption as revealed during the evaluation.
- Consider formulating a policy that allows the constitution of a taskforce and institutionalized quarterly joint review of data.
- ICT to retrain and equip staff with all the required skills to realize the best out of what the E-Tracker can offer, including the analysis and interpretation of multiple data variables.
- ICT and EPI working together, should undertake problem solving "handson" training supervision in the two pilot sites at least once weekly during the first three months after installation and training on the offline version of the E-Tracker.
- RHDs as frontline supervisors should participate in all E-Tracker related skills training and to revise their supervision checklist to include issues around the digital immunization register



## Long Term Recommendations from the Evaluator

- EPI to consider a phased expansion strategy, gradually moving from one region to another at an interval of two years to allow for consolidation of gains in new expansion regions.
- Undertake fundraising activities such as the preparation of high quality funding proposals and share with potential donors including PATH, Gavi, UNICEF and WHO.
- Use higher level authority such as the Permanent Secretary and the Minister of Health and Social Welfare to explore possibility of private sector participation and financing of equipment and internet connectivity costs.
- The EPI Management and especially the RHDs must endeavour to undertake regular supervision to support implementation and post implementation regions.



# Thank You