



Implementation of DHIS2 in DRC: processes and challenges

Dr Salomon SALUMU SIYANGOLI

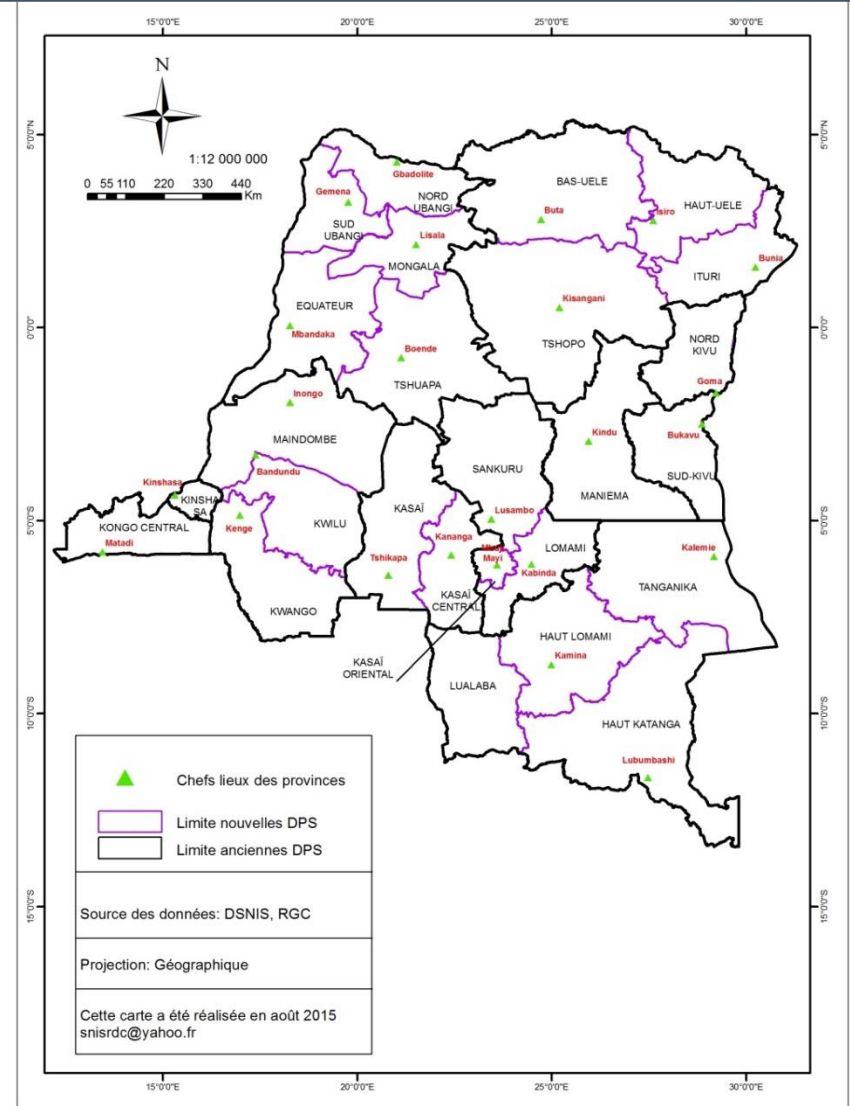
Division Chief SNIS/DDSSP/ MSP/RDC

Head of Division HMIS/MOH/DRC

Presentation Outline

1. Overview of DRC
2. Health system of DRC
3. Implementation Steps
4. Implementation Process
5. Current coverage of DHIS2 in DRC
6. Challenges and outlook

1. Overview of the DRC

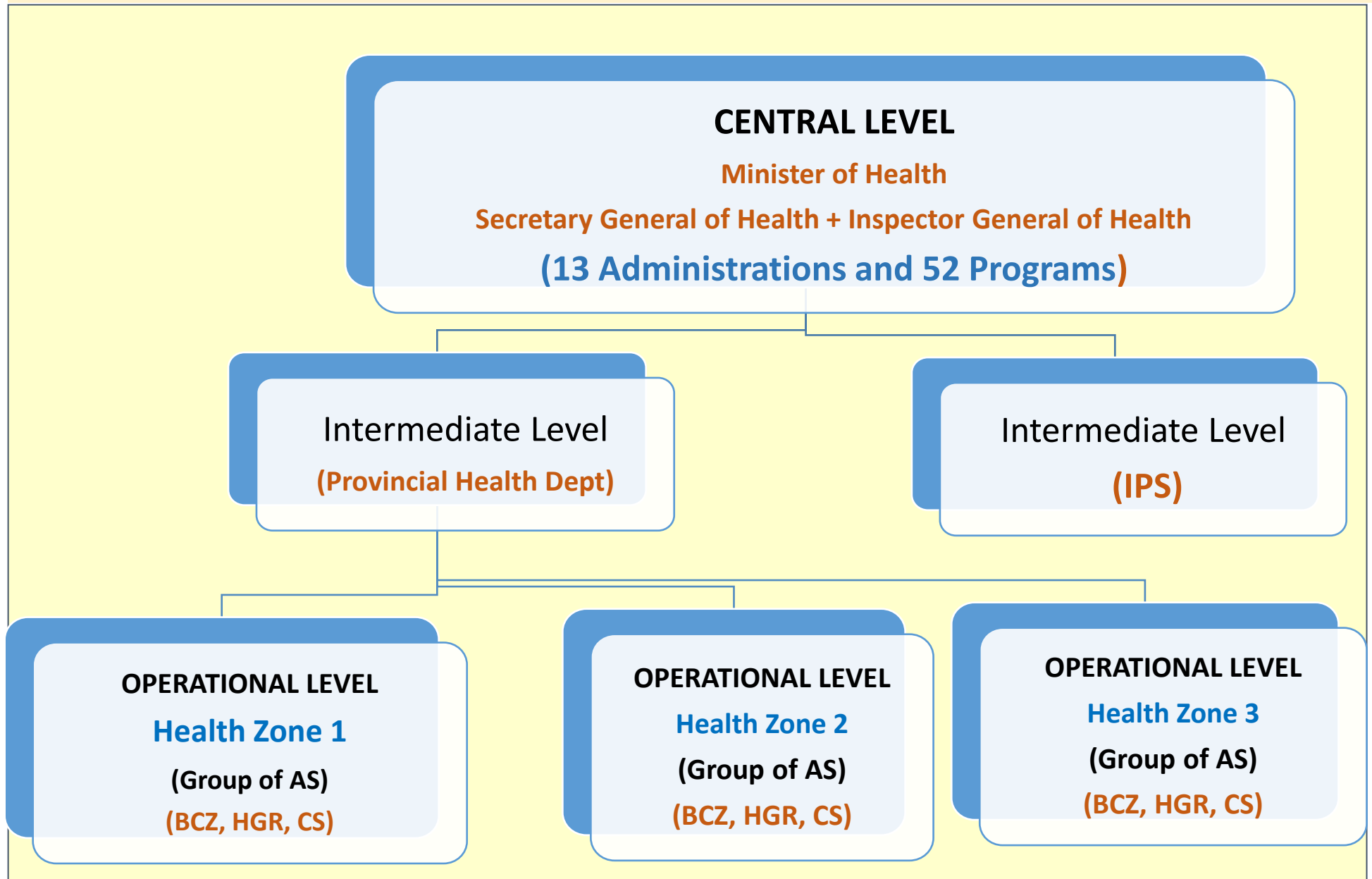


Surface area: 2 345 409 Km²

Population: More than 80 million

26 provinces

2. Health System of DRC



3. DHIS2 Implementation Steps in DRC

- First unsuccessful attempt with DHIS1 in 2010 with the USAID project AXXes
- Learning trip to South Sudan in collaboration with IMA/DFID in May 2012.
- Option to implement **DHIS2** software in DRC with the technical assistance of IMA, then BAO and OSLO in July 2013.
- Progressive implementation of **DHIS2** (beginning in May 2014 and total coverage of the country in December 2016. 516 health zones and 26 provinces)

4. Implementation Process (1)

a. From adoption to setup:

- The adoption of DHIS2 was in response to the question of data centralization, which was not possible with the old software GESIS for 3 reasons:
 - Provincial-specific paper tools
 - MS ACCESS used to configure GESIS was limited to small databases
 - Did not use the internet to improve the timeliness of reports
- The settings were made by the national IT following an initial training by the experts at OSLO and HISP in South Africa
 - Settings were based on a comprehensive copy of GESIS
 - Non-compliance with good practices of DHIS2

4. Implementation Process (2)

b. First launch of DHIS2:

- First training in one province in May 2014:
A lot of challenges for both the learners and with the DHIS2 software
- Causes of challenges:
 - **Level of learners:** many did not have basic computer skills
 - **Nostalgia for GESIS:** a lot of users wanted DHIS2 to behave exactly like GESIS
 - **Lack of equipment:** they were trained but without computers so they did not have anywhere to practice the concepts learned
 - **Version of DHIS2 (2.13)** did not offer enough functionality

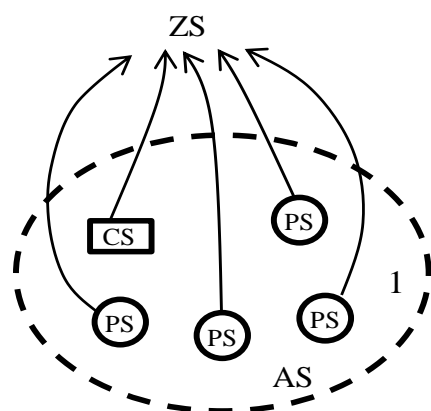
4. Implementation Process (3)

c. Reporting at Double Speed:

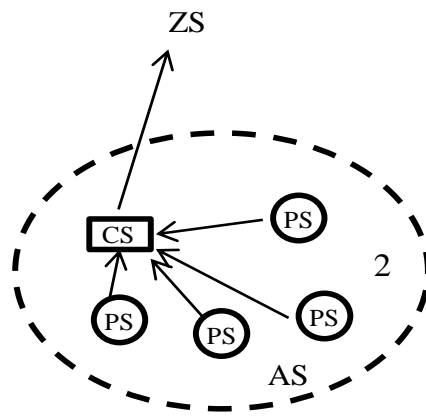
- By 2015, only 13 of 26 provinces were planned, but it was necessary to be able to centralize data across the whole country.
- Health zones in 13 other unplanned provinces should use a hardcopy synthesis framework for encoding in DHIS at the provincial level.
- Two directors from these provinces were trained to encode the synthesis reports in the DHIS2.
- This approach to capturing data has not been successful because :
 - The use of paper reporting forms with different data input fields.
 - Communicating the approach to health zones by the provincial level did not follow

4. Implementation Process (4)

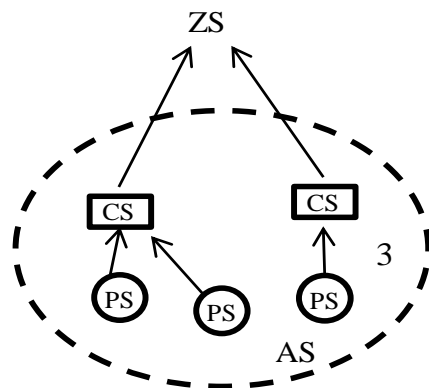
d. Learning by trial and error



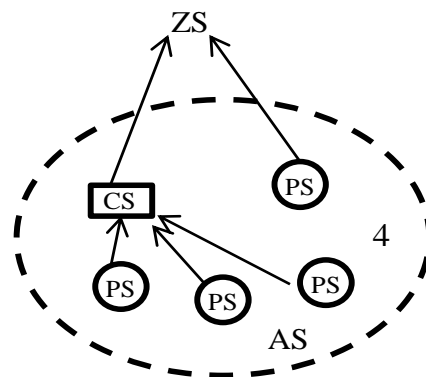
Unités de collecte des données : 5



Unités de collecte des données : 1



Unités de collecte des données : 2



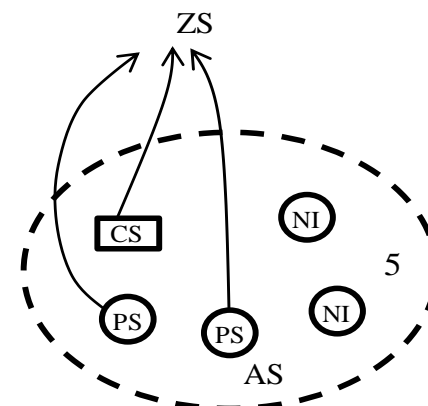
Unités de collecte des données : 2

Systèmes de rapport actuels des Centres et des Postes sanitaires vers la zone de santé

Unités de collecte des données, (unités enregistrées comme «rapporteurs» dans DHIS 2)
Utilisées pour le calcul du taux de complétude.

Situations 1 & 5: toutes les unités 'Intégrées' sont enregistrées comme unités de collecte des données.
Ces unités sont aussi incluses dans le calcul du taux de complétude.

Situations 2, 3, 4: La complétude peut être calculée uniquement sur la base unités de collecte des données.



Unités de collecte des données : 3
Pas d'intégration/ rapport: 2

4. Implementation Process (5)

e. Second version launch: Modular approach

2.1. ACTIVITES CURATIVES

Filtrer dans section

	<5 ans			
	AS	HAS	ZS	HZ
Nouveaux Cas				
Dont Femmes enceintes				
Dont nouveaux patients				
Dont adherents de mutuelle de sante				
Anciens cas				
Dont Femmes enceintes				
Dont anciens cas contre-referes				

Filtrer dans section

	<5 ans		
	AS	HAS	ZS
Nouveaux Cas			
Dont Femmes enceintes			
Dont nouveaux patients			
Dont adherents de mutuelle de sante			
Anciens cas			
Dont Femmes enceintes			
Reféres pour le CC / autres structures			

Data Set A- Services de Base
 Period December 2016 ▼ Pre

1. Consultations
2. Sante de la mere
3. Planification fa

1.1 Utilisation des Services Sanitaires

	< 5 ans	5 ans +
Cas reçus		

1.2.1 Consultations curatives

	Féminin		Masculin	
	< 5 ans	5 ans +	< 5 ans	5 ans +
Nouveaux cas				

1.2.2 Consultations curatives

	Nombre
Anciens cas	

4. Implementation Process(4)

d. Learning by trial and error: Lessons learned

1. Pyramid: change, formatting errors, missing certain health facilities, health facilities present that are closed... in short several complaints.



2. User accounts: Unlike previously, it was impossible to import users from the old database because of the password encryption.

At the annual SSP 2016 review held in June 2017: All data managers were invited to fix the many user complaints under the supervision of national level informaticians.

4. Implementation Process (5)

d. Learning by trial and error: Lessons learned

3. High load on the server:

Improving data completeness leads to maximum utilization of the processor. A plan to increase server resources over the next 5 years is in development.

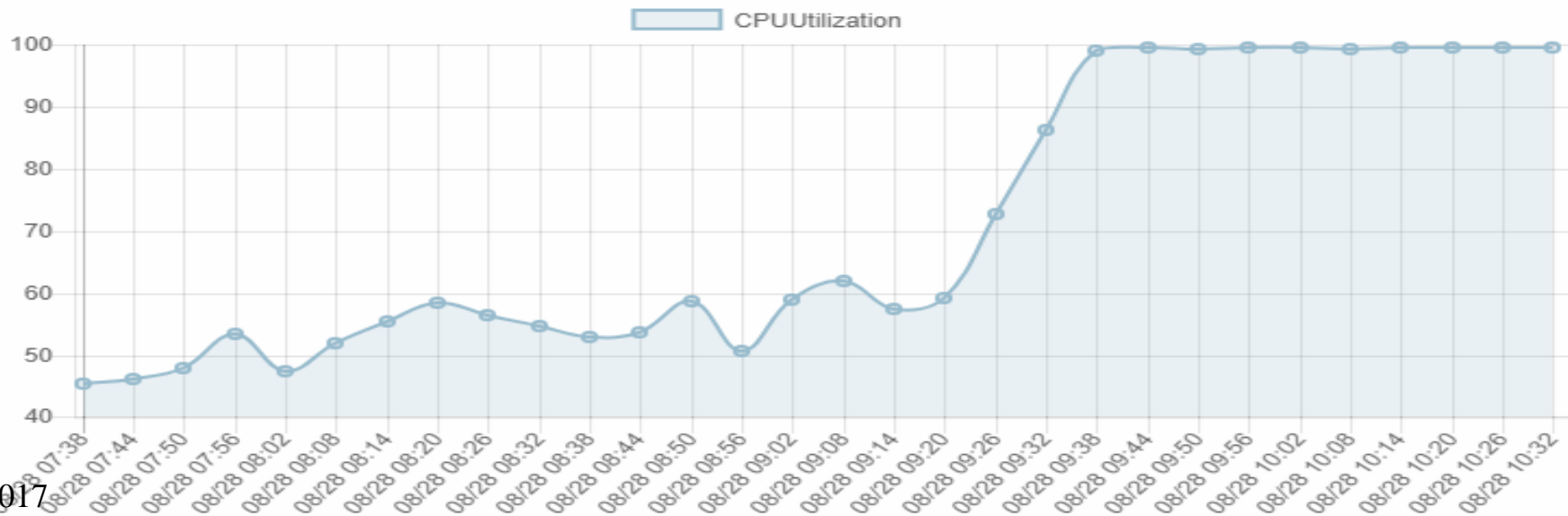
CPU usage (percent)

Interval

Last 3 hours

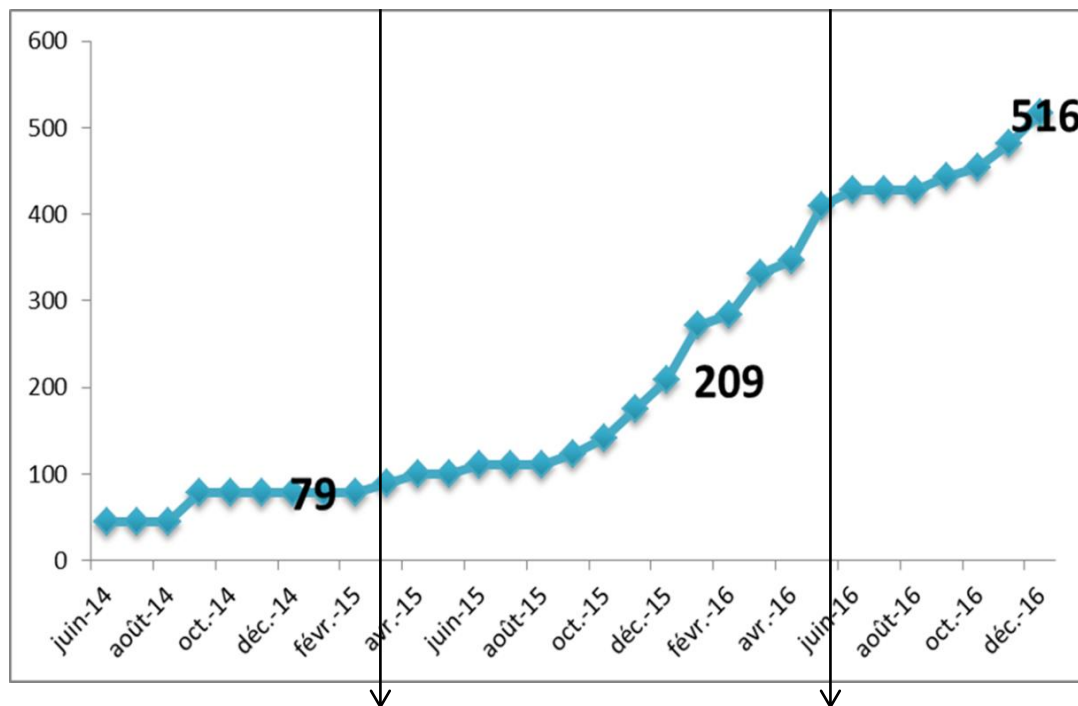
Statistic

Average



4. Implementation Process (6)

d. Learning by trial and error: Lessons learned



4. Evolution of integration

1. Pilot and learning phase (May 2014 to June 2015 especially Kasai, Maniema and Kasai Central and Kinshasa)

2. Scale-up phase (July 2015 to June 2016: Provincial Health Dept highly motivated, good connection, presence of human resources)

3. Completion phase (July 2016 to Dec 2016: Provincial Health Dept with a lot of challenges)

4. Implementation Process (6)

d. Learning by trial and error: Lessons learned

5. Integration of priority specialty programs

- Reporting in HMIS framework:
 - EPI
 - National Malaria Program
 - National Reproductive Program
 - National Nutrition Program
- In modular form
 - National Surveillance Program
 - National Program for TB and Leprosy
 - National HIV/AIDS program
 - National Program for Blood Transfusion
 - National Essential Medicines Program
 - National Malaria Program SS
- A plan for the integration of other programs in DHIS2 has been developed

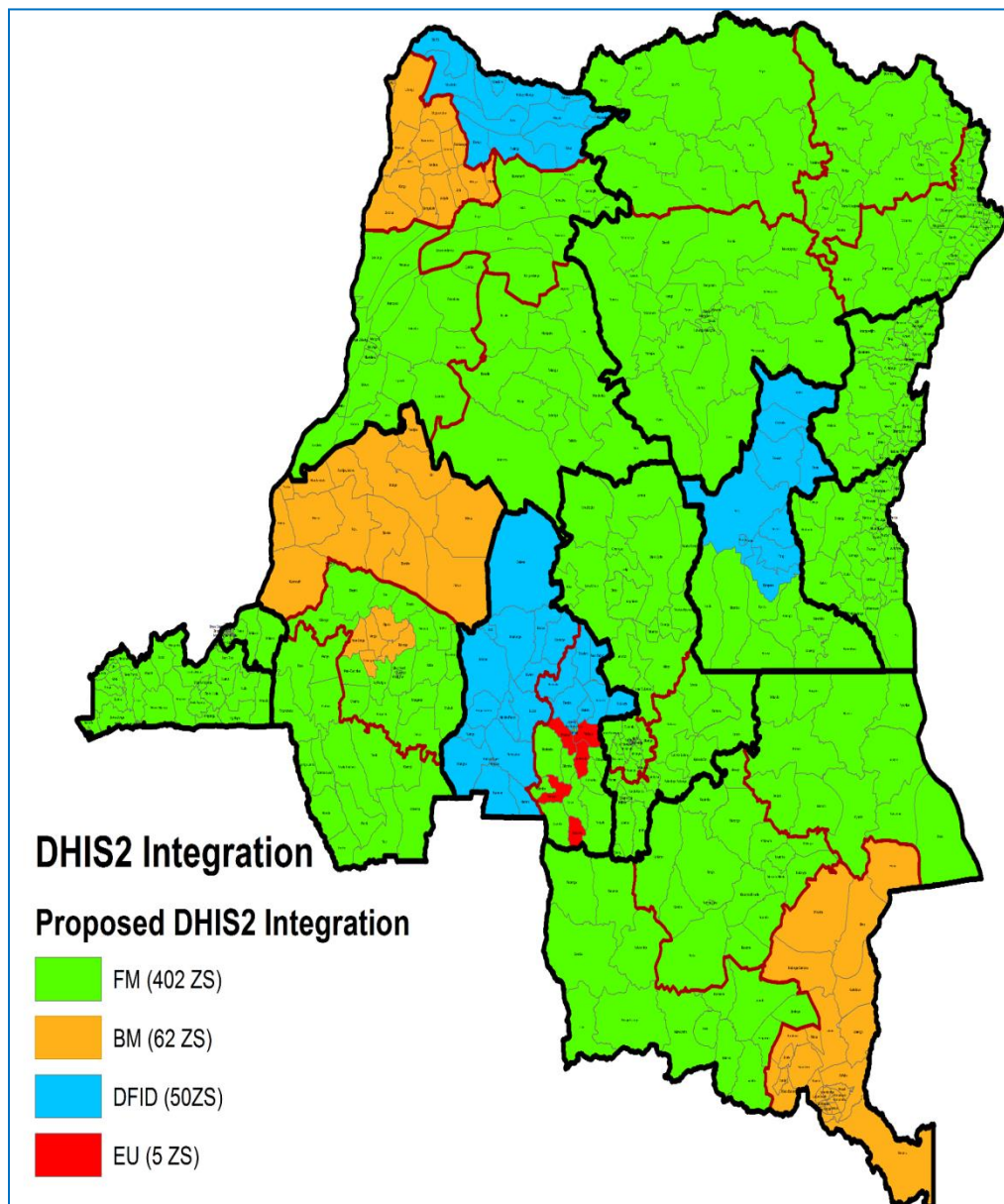
4. Implementation Process (7)

d. Learning by trial and error: Lessons Learned

6. Internet connectivity:

- Telephone companies supply internet signal to health zones. 449 health zones have access to the internet, 312 have a 3G modem.
- More than 67 health zones do not have an internet connection with the telephone network and are dependent on VSAT.
- Waiting for the re-establishment of the internet with VSATs installed by GAVI, the multi-donor project supporting the HMIS/DHIS2 located at the DDSSP ensures the transmission
- An audit on the acquisitions and operation of VSAT antennas purchased by GAVI is being prepared

5. Current coverage of DHIS2 in DRC (1)

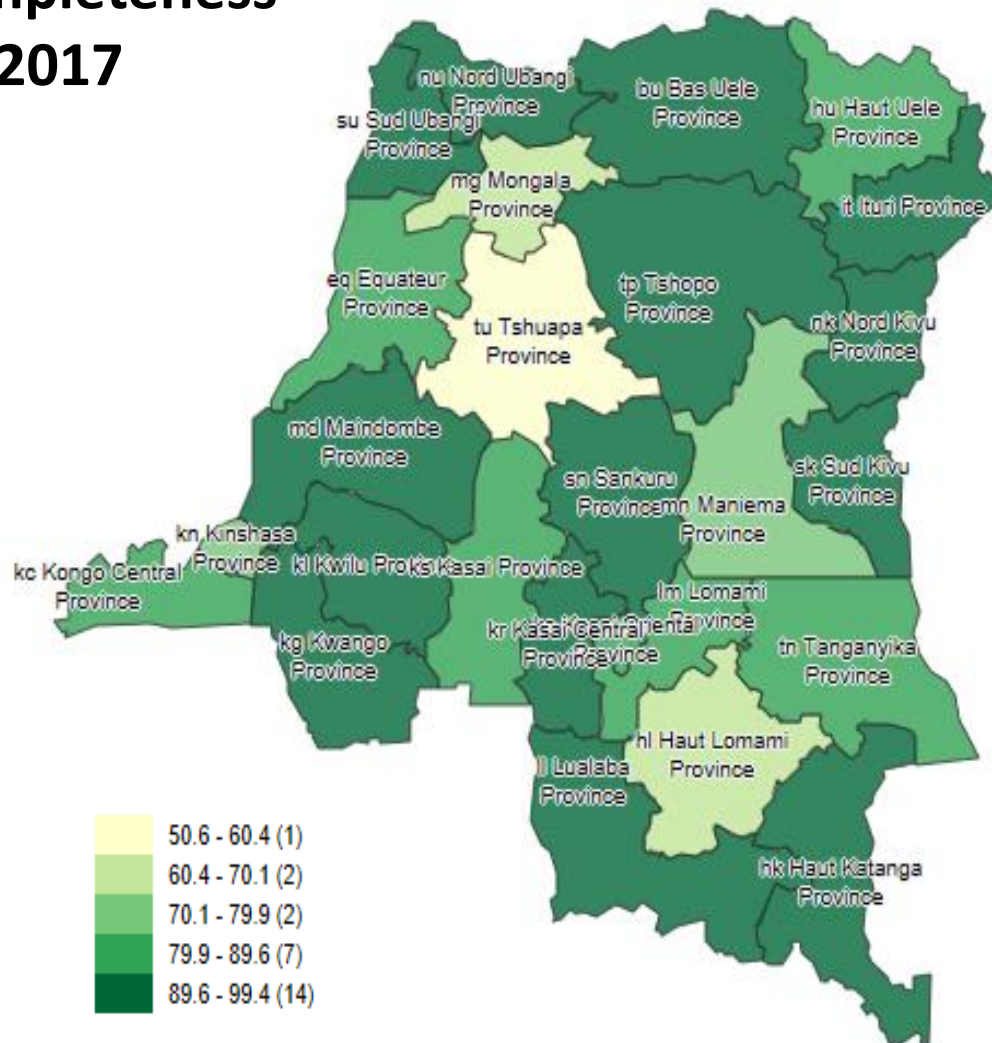


Support to HMIS/DHIS2 in all 26 provinces:

- Global Fund: 19 provinces
- World Bank: 3 provinces
- DFID: 4 provinces
- Other donors and projects like MEASURE/USAID, PROSANI+/USAID, and PAPNDS/UE based in field

5. Current Coverage of DHIS2 in DRC (2)

Basic Service Completeness Q1 2017

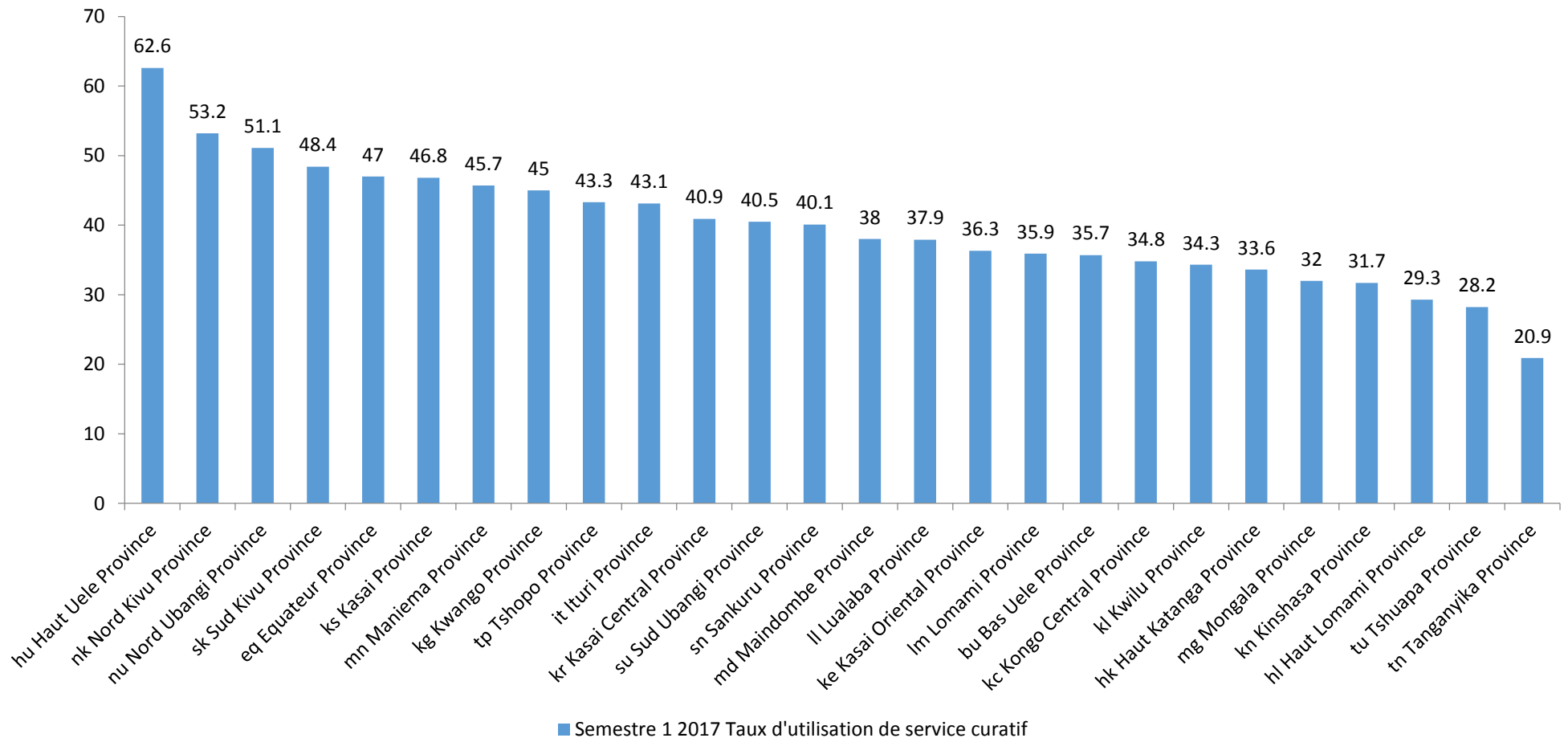


- Completeness in Q1 2017 is 86.3% for basic service (Sunday Sept 17, 2017)
- 21/26 or 80.7% of the provinces have at least 80% completeness
- The last province (Tshuapa) has 50.5% completeness

5. Current Coverage of DHIS2 in DRC (3)

Example of an indicator taken from DHIS2

Quarter 1 2017 Curative service utilization rate



6. Challenges and outlook

1. Improved availability of the inputs necessary for the integration and operation of DHIS2 in 516 health zones. (trained people, computers, internet connection, energy, registers, forms,...) and computerized versions of the register and patient records.
2. Improved availability of complimentary data modules on the DHIS2 platform.
3. Stability and durability of the internet connection, especially with VSAT in the health zones and Provincial Health Dept
4. Monitoring and stabilizing facilities in the health zones
5. Availability of a informatician/computer scientist within Provincial Health Dept (PHD)
- 6. Available data (at 86%), focus on quality improvement**
7. Strengthen the use of DHIS2 data at the health zone and PHD level for decision making

8. International experts (OSLO) are not readily available when needed

Thank you for your kind attention

