

# Report of

## DHIS2 Training for Data-Administrator and Developer

August 22-25, 2023 at Golden Lotus Hotel  
at 53-55 Hang Trong Street, Hoan Kiem District, Hanoi, Vietnam.



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## Report of

### DHIS2 Training for Data-Administrator and Developer

**Date :** 22 - 25 August 2023

**Time :** 8:00 – 17:00

**Organizer :** HISP Vietnam Co., Ltd

**Venue :** Golden Lotus Hotel at 53-55 Hang Trong Str, Hoan Kiem Dist, Hanoi, Vietnam

#### Objective:

- The training on DHIS2 for Data-Administrator and Developer is under the framework of the agreement on DHIS2 Online Consolidated Data System by using District Health Information Software 2 (DHIS2) period 2022- 2023 between NCHADS and HISP Vietnam Co.Ltd.
- This is the chance to learn about the latest developments and innovations, to meet and share experiences about using DHIS2 over the last few years and ways forward.

**Facilitators:** Mr. Jonh Lewis, Mr. Nghia Tran Nguyen, Ms. Thi Thu Huyen Le , HISP, VN

#### Participants:

##### Group 1: DHIS2 Developer/Programmer:

1. **Mr. Thong Dolla**, Lead IT Project Manager
2. **Mr. Pov Ratha**, Software Developer and Data Analyst
3. **Mr. Eng Bunthoeun**, SI, US-CDC Cambodia

##### Group 2: Data Administrators:

1. **Dr. Kaeun Chetra**, Deputy Head of technical bureau and Head of DMU
2. **Mrs. Lanh Chakrya**, Senior Data Management Officer
3. **Mr. Leng Chanratana**, , Senior Data Management Officer
4. **Mr. Ke Ang Heng**, IT officer
5. **Mr. Yen Sophon**, Data Management Officer
6. **Mr. Kong Sithorn**, Data Management Officer, Software Developer
7. **Mr. Long Vicheth**, Data Management Officer

#### Day 1: 22 August 2023:



- Welcome speech and Opening the ceremony by Jonh Lewis, Director of HISP, VN and Dr. Kaeun Chetra, Representative of NCHADS, Cambodia
- Reviewed and updated/ modified the agenda
- Review data flow from legacy database to DHIS2 environment
- Introduction to scripts to import data from the NCHADS server to Linode server: integrators and configs to de-encrypt the passcode and turn the data to SQL format and, integrator-work-final to connect and map the data from SQL to DHIS2. Data: data by programs: VCCT, ART, Lab.
- Summary and question

**Day 2: 23 August 2023:**

- Review of Day-1
- Review DHIS2 documentation, [link](#)
- Review indicator calculation results verified with the ones in the standard report:
  - # of new patients registered
  - # of patients re-tested for HIV
  - # of lost-follow-up patients who returned (no clinical contact within 28 days)
  - # of lost-follow-up patients who returned (no clinical contact > 28 days)
  - # of patients newly started ART
  - # of active ART patients at end of the period
  - .....

Only one indicator, indicator #1 was correct. However, we suspected 2 things: 1) we might not use the same data source, please find Action #2 for the solution.

- Discussed and agreed on 3 general categories to be used to disaggregate data for all the indicators: Sex, Age (0-14, >14 yrs & 5-yr band) and KP type, please find the attached document for more details . In this case, we will create one main indicator for the total number, then we create category options, category and category combination for Sex (male, female), Age (0-14, >14 & and the 5yr-grp) and KP type (FEW, MSM, TG...) in the maintenance. Then, we will develop the script to create aggregate data elements program data set, and program indicators (PI). Then, these PI will be pushed to the indicator group name that we already designated. This will reduce the lengthy process and complicated formulas as we have in the VCCT indicators. This means, we have one main indicator and several PIs depend on # of PI data disaggregation, for example, indicator “Same-day ART” we will have 3 PIs (0 day, 1-7 days and >7 days). These main indicator and PIs have the same category dimension and the percentages. ....

- Summary and Questions



**Day 3: 24 August 2023:**

- Review of Day-2
- Exercise and practices on the above work to create a main indicator and category options and CC. Then Nghia demonstrated the scripts and how to run them. → Nghia will complete the scripts to create ADE, Data Sep and PIs to loop all months in a year and all sites in the organit
- Summary and Questions



**Day 4: 25 August 2023:**

- Review with Practice of Day-3  
**Team split into 2 groups: Administrator and Developer.**
- Administrators continued reviewing the indicators
- Developers facilitated by Nghia working on:
  - Web API analytics table hook for SQL View and Export, link
  - Practice Exercises to Create one SQL table contain Des and Attributes from VCCT Program, then write SQL View to get all patient's data who are Male and Date\_of\_birth before 2000;
  - Develop a Script App for creating users, username, password, role and org-units by using list in Excel.



**Next Step and action to be taken:**

- **John** to create status of data import: date-time of import, last data-time of update in the backup data for each site.
- Verify ART indicators btw MPI and ART quarterly report. Dolla send the data-backup file to John, will import the data again. **Ratha/Sithorn**, who will send the line list data by indicator in the report to **Huyen**, who will investigate if numbers are not matched btw MPI and the report.
- **Nghia** to update DHIS2 program to view log (by whom at date-time)
- **Nghia** will finalize scripts for creating ADE, dataset, and PIs
- **Bunthoeun** will review the indicators for category dimension and data disaggregation.

Approved by  
Director of NCHADS

Seen and Checked  
Head of DMU

Date 28 August 2023  
Prepared by



**Dr. SAMRETH SOVANNARITH**



Dr. Kaoeun Chetra



Mrs. Lanh Chakrya