Benefits and challenges of building a strong national HMIS using DHIS2: Case of Burkina Faso malaria data collectionsystem

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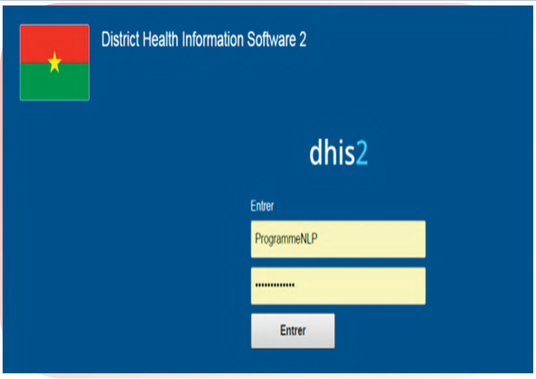
About Organization and project

- Jhpiego in an American International NGO working in Burkina Faso since 1996.
- Since 2013, Jhpiego was implementing an 5-years USAID funded project that aims to support the National Malaria Control Program (NMCP) to achieve his goals reduction of malaria mortality and morbidity by 50%.
- Burkina had a HMIS that collects data, but there were also parallel systems such as malaria data system developed by NMCP.
- The malaria DQA 2014 showed poor data accuracy, low timeliness, low completeness and low reliability of key indicators. The integration of malaria data into DHIS2 (used by HMIS) was proposed to improve data quality.

Malaria data integration into the national DHIS2 database

- Selection of key malaria indicators,
- Revision of the data collection and reporting tools/forms,
- Definition of validation rules and the data elements,
- Creation of malaria window and data tables in Burkina window on DHIS2,
- Implementing and evaluation of a Pilot phase of the use the integrated national database using DHIS2
- Training of all data managers
- Scale up of the use of the integrated database at national level



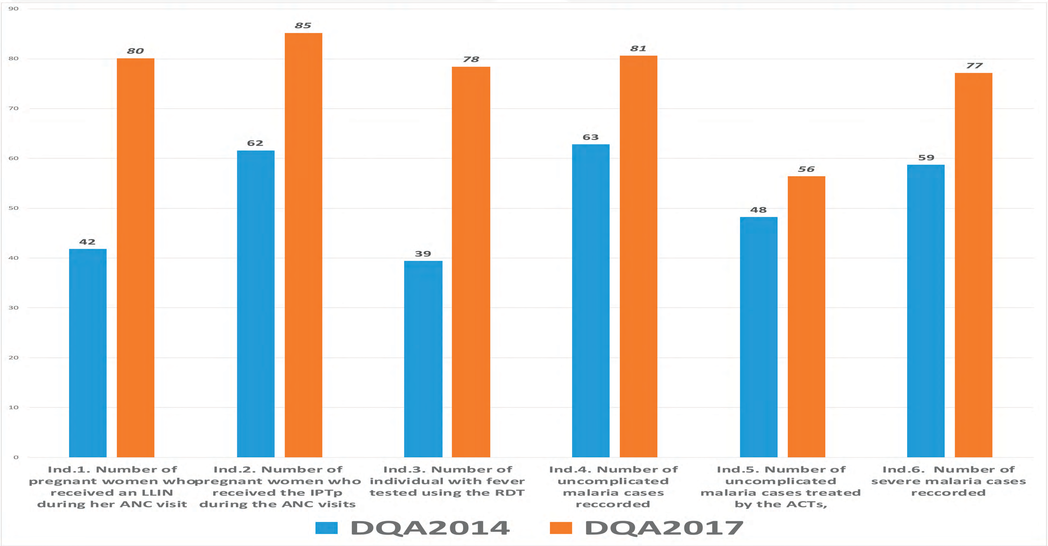
NMCP access to malaria data through

Benefits of the use of DHIS2

- Using DHIS2 allow integration of all diseases data into the national HIMS database
- Collecting and managing malaria data through the HMIS database using DHIS2 improved malaria data quality.
- The DQA 2017 showed that : Accuracy increased (43% to 83%), Timeliness (62% to 80%), Completeness (64% to 78%), Reliability (67% to 87%), Precision (see the graph below).

Challenges of DHIS2 use in Burkina

- Low Internet connection at field level
- High cost of Internet connection
- Lack of computer equipment at national level (HMIS management Service and NMCP) for data management
- Lack of computer equipment at health district level for data capturing and storage



Comparison of the level of precision of 6 malaria indicators across the 2014 and 2017 DQA