

Validation of the DHIS2 tracker application for supporting IDSR implementation in Somalia

Workshop Report



Dates;
17th-18th October 2022

Workshop Venue;
Serena Hotel, Nairobi

Drafted by;
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Background

To date, and with technical support from WHO Somalia country office, the Somalia federal ministry of health and human services (FMoH) completed the development of the national technical guidelines for IDSR implementation in Somalia. The guidelines were validated and finally endorsed by the top leadership at the FMoH. The guidelines contain all the tools and procedures (SOPs) for conducting all surveillance functions (detection, reporting, analysis, outbreak investigation, outbreak preparedness, outbreak response, risk communication, supportive supervision, IDSR monitoring and IDSR evaluation) at all levels of the health system in Somalia. Implementation of these guidelines will require Information Technology (IT) support.

With technical support from UNICEF and HISP-Tanzania, the FMoH has developed the DHIS2 Tracker application to support IDSR implementation in Somalia. Among others, the application will enable direct submission of immediate and weekly surveillance reports from participating health facilities (and from Community Health Workers-CHWs) into DHIS2. The application will also automate other surveillance functions like alert verification, linking surveillance data with laboratory data and data analysis, hence simplifying IDSR implementation in Somalia. Before its roll-out, the application needed to be validated; to be sure that its configuration is aligned with the standard operating procedures (SOPs) for conducting the surveillance functions which it seeks to automate hence the justification for the workshop to validate the DHIS2 tracker application for supporting IDSR implementation in Somalia.

The workshop was organized by the FMoH with technical and financial support from WHO Somalia country office. The workshop was held from 17th to 18th October 2022 at Serena hotel, Nairobi. The objective of the workshop was to review the current configuration of the DHIS2 tracker application and provide final feedback on how to improve its configuration before it is rolled out in Somalia. The workshop was attended by 35 participants (and facilitators) from FMoH, NIH, State MoHs, UNICEF, HISP-Tanzania, CDC and WHO Somalia country office. The full list of workshop

participants (and facilitators) and the workshop schedule is provided in table 1 and table 2 respectively.

Table 1: List of participants during the workshop to validate the DHIS2 tracker application for supporting IDSR implementation in Somalia

N o	Name	Position/Organization	Role
1	Ali Abdirahman Osman	Director of Public Health	Participant
2	Sahra Isse Mohamed	Head of NPHRL	Participant
3	Dr. Abdullahi Yusuf Mohamed	National Data Officer	Facilitator
4	Mohamed Ahmed Omar	HMIS Coordinator	Participant
5	Hassan Sh. Ahmed Mohamed	Head of HMIS	Facilitator
6	Dr. Abdirizak Mohamed Abdi	PHE Coordinator	Participant
7	Abdirizak Mohamed Artan	HMIS Manager	Participant
8	Mr. Abdifatah Diriye Ahmed	Head of NIH	Participant
9	Mukhtar Abdi Shube	EPI Manager	Participant
10	Faiza Kasim Hassan	HMIS Officer	Participant
11	Abdifatah Mohamed	Director of Planning and Policy	Participant
12	Sagal Mohamed Roble	IHR	Participant
13	Hassan Mohamed Ali	PHEOC	Participant
14	Khadija Mzava	HISP-Tanzania	Facilitator
15	Tuzo Engelbert	HISP-Tanzania	Facilitator
16	Isabella Ngowi	HISP-Tanzania	Facilitator
17	Suleiman Bangura	WHO	Participant
18	Steven Ssendagire	WHO	Facilitator
19	Mary Karanja	WHO	Facilitator
20	Rennatus Mdodo	CDC	Facilitator
21	Esther Wambui	WHO	Administrator
22	Mengistu Kumlachew	WHO	Facilitator
23	Abdirahman Muhamed	UNICEF	Participant
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Table 2: Schedule for the workshop to validate the DHIS2 tracker application for supporting IDSR implementation in Somalia

DAY ONE; 17 th October 2022		
TIME	ACTIVITY	FACILITATOR
08.30 AM-09.00 AM	Registration	WHO Admin
09.00 AM-09.30 AM	Participants introduction	Hassan Sheik
	Remarks by WHO	WHO
	Remarks by FMOH	FMOH/NIH
09.30 AM-10.00 AM	Administrative update	WHO Admin
	Workshop expectations, objectives, ground rules	Hassan Sh
10.00 AM-10.30 AM	Introduction to and update on IDSR progress in Somalia	Steven Mary
10.30 AM-11.00 AM	TEA BREAK AND GROUP PHOTO	
11:00 AM-12:30 MD	Introduction and Demo of the DHIS tracker application and how it can support implementation of IDSR in Somalia • Case Notification • Laboratory Request and Results • Weekly Reporting • Analytics	HISP
12:30 MD-01:00 PM	Installation and Accessing DHIS2 tracker app	HISP
01.00 PM-02.00 PM	LUNCH BREAK	
02.00 PM- 03.30 PM	Practical session ONE; Case Notification	All
03:30 PM-04:30 PM	Feedback	All
04.30 PM-05.00 PM	TEA BREAK	
DAY TWO; 18 th October 2022		
TIME	ACTIVITY	FACILITATOR

08:00 AM-09:00 AM	Practical session TWO; Laboratory Requests & Results	All
09:00 AM-10:00 AM	Feedback	All
10.00 AM-10.30 AM	TEA BREAK	
10:30 AM-11:30 PM	Practical session THREE; Weekly reporting & Analytics	All
11:30 PM-12:00 PM	Feedback	All
12:00 PM-01:00 PM	Summary of issues to address	HISP
01.00 PM-02.00 PM	LUNCH BREAK	
02:00 PM-03:00 PM	Next steps and timelines • Piloting IDSR implementation including field testing of the DHIS2 tracker application	Hassan Mary kumla
03:00 PM-03:30 PM	Completing the IDSR readiness assessment tool	All
03:30 PM-04:00 PM	Workshop evaluation	All
04:00 PM-04:30 PM	Closing ceremony	FMOH/NIN

Summary of key presentations made

On the first day of the workshop, a presentation covering the overview of IDSR and the current progress towards IDSR implementation was made. The presentation was aligned within the broad framework for IDSR strategy implementation in the EMRO. Among others, the presentation highlighted the need for Information Technology (IT) to support/simplify implementation of IDSR functions like immediate reporting, weekly reporting, alert verification, linking surveillance data to laboratory data and surveillance data analysis. The presentation was important in preparing the participants to conduct an objective review of the developed DHIS2 tracker application. The link to the presentation is provided below.

<https://docs.google.com/presentation/d/1BYPge6g2oOehfqdrKqS10yMugD22ByaQ/edit?usp=sharing&ouid=114290701937184242498&rtpof=true&sd=true>

Another critical presentation was made by HISP-Tanzania covering a theoretical overview of the developed DHIS2 tracker and how the tracker will be used for immediate reporting, weekly reporting, alert verification, linking surveillance data and laboratory data and automated data analysis. Critical capabilities of the developed application included; 1) the application being android enabled, 2) having capacities for both off and online modes, 3) ability for alert verification, 4) ability to link surveillance

data with laboratory data, 5) ability for multi-level data analysis. The link to the presentation is provided below.

https://docs.google.com/presentation/d/1GdHP1UCRNNgXk_Gu_4ldbwwootOGGXN5/edit?usp=sharing&oid=114290701937184242498&rtpof=true&sd=true

The last critical session of the workshop was a guided practical session on the DHSI2 tracker application. The session was guided by the HISP-Tanzania team. Working in small groups, the participants practiced each of the functions of the developed application. Following the practical sessions, participants gave feedback on what was configured well and what was not configured well. For what was not configured well, the participants gave their recommendations on what should be done to improve the configuration of the application. At the end of the workshop, a summary of the proposed changes was presented and discussed. Timelines for addressing the proposed changes were also developed. A small team to track and oversee the implementation of the proposed changes was established.

Picture moments during the workshop





Issues to address/Next Steps towards finalization of the DHIS2 Tracker application

Issues	Recommendation
The process of accessing the immediate and weekly reporting forms is not simple	At the time of entering data into the immediate or weekly reporting form, the interface should take the user directly to the form without the initial search process. Drop the search step
Internal validation	Deaths should be part of the cases and for that matter, the system should be configured in such a way that it cannot accept deaths which are more than the cases
Data entry currently provides for future dates	The future dates options should be removed but maintain previous dates to enable sending of reports for previous reporting periods
ZERO reporting	System should be able to differentiate between a "ZERO" and a "NO REPORT"

Improving the weekly reporting FORM	If possible, the weekly reporting form should have clear borders to avoid the possibility of filling the wrong cells
Lay-out of the weekly reporting form on the mobile application	Cells for cases and deaths, below and above 5 years should be put onto one screen without the need to navigate from one screen to another when filling the same report
Case ID	The auto-generated code should be meaningful to reflect the state, region, district and facility where the case was detected, the way Polio surveillance codes are generated. The patient's name should not appear anywhere in the data
Alert verification	Reports generated from health facilities should be verified by the district team. The need for verification should not however prevent the reports from getting delivered to the national server. The database should instead have another variable indicating whether the report was verified (as a true or false alert)
List of conditions for immediate reporting and weekly aggregate reporting	The drop-down list for conditions for immediate reporting should be revised to include all the conditions for immediate reporting. The form should be improved to include all the conditions for weekly aggregate reporting
Alert notification and laboratory request notification	When a report is generated, the district team should be notified. This is the same team that should receive the laboratory request sent by the reporting health facility
User specific dashboards	Different users will define and share with the HISP team the information that they want to be reflected on their user specific dashboards.
Automate production of the weekly bulletin	HISP team to configure the dashboard of the PHE units at state and federal level to enable auto generation of the weekly surveillance bulletin

Next steps

	Next step	Required Action
1	Establishment of a small group to follow up on implementation of the proposed adjustments in the configuration of the DHIS2 tracker application	The proposed team includes; 1. Hassan Sh 2. Steven Ssendagire 3. Mengistu Kumlachew 4. Director of Planning 5. Tuzo, Zava and Isabella from HISP-Tz The team will execute its follow up function through weekly zoom meetings with HISP-Tanzania The meeting link is provided below

2	The follow-up team to meet every week	For the team to note
3	All possible suggested recommendations to be addressed by November 6 th 2022	For all to note
4	The IDSR TWG to be updated on the progress towards finalization of the DHIS2 tracker application	The IDSR secretariat and IDSR TWG chair to convene bi-weekly IDSR TWG meetings to review tracker finalization progress
5	Encourage and support the ongoing manual and semi-automated immediate and weekly aggregate summary reporting to continue while the DHIS2 tracker is finalized	WHO, FMOH, UNICEF and MoHs to note
6	To encourage and continue providing technical support for production of the weekly epidemiological at both federal and state level	WHO, FMOH, UNICEF and MoHs to note
7	To begin IDSR implementation either through a pilot or otherwise before end of the year 2022. This will require the physical presence of HISP-Tanzania to provide real-time trouble shooting	All to note

Workshop evaluation

No	Variable (Evaluation Question)	Proportion (%) of workshop participants agreeing or strongly agreeing with the variable									
		10	20	30	40	50	60	70	80	90	100
1	There was free exchange of ideas during the workshop										
2	The workshop duration was adequate										
3	Development of the DHIS2 tracker application is timely										
4	Size of groups during group discussion was adequate										

5	Instructions for group work were very clear and understandable										
6	Workshop materials were shared in time										
7	Workshop facilitators were well prepared and knowledgeable										
8	Relevant stakeholders were well represented in the workshop										
9	My recommendations will be used to improve the configuration of the DHIS2 tracker app										
10	I have gained knowledge on how the DHIS2 tracker application works										
11	Use of the DHIS2 tracker will ease/simplify my surveillance related work										
12	The DHIS2 tracker application will improve efficiency and productivity of my work										
13	Use of the DHIS2 tracker will improve performance of the surveillance system										
14	The DHIS2 tracker application will improve timeliness and completeness of reporting										
15	The DHIS2 tracker will improve the accuracy of reporting										
16	The DHIS2 tracker will improve management of outbreak alerts										
17	Entering surveillance data into the DHIS2 tracker is easy										
18	Sending surveillance data through the DHIS2 tracker is easy										
19	Correcting errors in reported surveillance data is easy										
20	The DHIS2 tracker database contains all the required surveillance data variables										
21	The DHIS2 tracker application simplifies surveillance data analysis										
22	Information generated on the DHIS2 tracker dashboard is comprehensive										

Notes

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