

Summary workshop report

Analysis of health facility data for key health service indicators

Eastern and Southern Africa Region

Countdown to 2030 for Women's, Children's and Adolescents' Health, World Health Organization, African Population and Health Research Centre, UNICEF

Naivasha, Kenya, 27-30 November, 2018

Background

Health facility data are an important source of health statistics in countries. The facility data are used at national and local levels to obtain statistics for a range of indicators that feature prominently in national health plans and program and project monitoring. Many indicators can be used to track progress towards universal health coverage, especially when combined with household survey data. Scorecards and dashboards are increasingly popular methods of dissemination of progress and performance measures, intended to galvanize action based on data.

These health facility data-based indicators include causes of death and morbidity patterns among the people using health services, health service utilization and efficiency indicators such as OPD utilization and hospital admission and bed occupancy rates, as well as a range of program-specific indicators. Examples of the latter include indicators of the coverage of services such as immunization, RMNCH, HIV, TB and malaria, and increasingly quality of care indicators.

Data quality and computation of credible statistics from health facility data is not straightforward. Currently, country skills to deal with health facility data, carry out data quality assessment and adjustments and produce credible statistics is still limited, in spite of major advances in the routine facility information systems. National analysts in the ministry of health, public health institutions and national statistical offices need to have an optimal set of tools and skills to analyze and synthesize health facility data and produce the best possible statistics with well documented audit trails. WHO has developed general guidance for the analysis of health facility data,¹ as well as a set of program-specific guidance materials.

The Countdown to 2030 regional initiative for Eastern and Southern Africa (ESA), led by the African Population Health Research Center (APHRC), conducted a first health facility data analysis workshop in Naivasha, Kenya, November 26-30, 2018. A total of 50 participants (Appendix 1) comprising of senior analysts from Ministry of Health, public health institutions and Universities from 18 ESA countries attended the workshop. About half of the participants were active DHIS managers or users. The Countdown team of facilitators was led by APHRC with John Hopkins University, University of Manitoba, WHO and UNICEF.

The objectives of the workshop were:

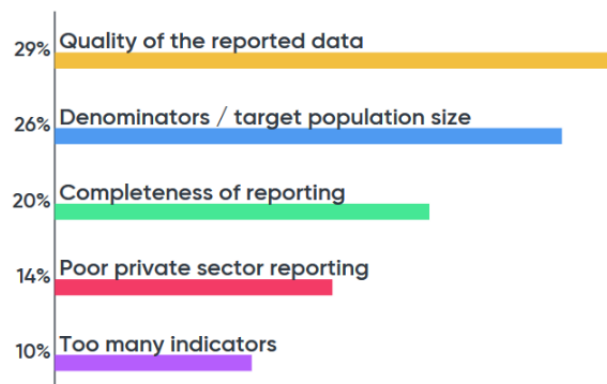
- To enhance and strengthen country capacity for analysis of health facility data;
- To generate evidence of sub national progress towards the service coverage component of Universal Health Coverage (UHC) using health facility data;
- To share and improve WHO general guidance on health facility data analysis.

The detailed workshop agenda is presented in Appendix 3.

Participants expectations

Before the start of the workshop, participants were asked to name the biggest challenges they face with facility data analysis; quality of the data reported (29%), issues to do with the denominator or target population (26%) and completeness of reporting (20%) emerged as the top three challenges.

¹ WHO. Analysis and use of health facility data: guidance for national and district planners and managers. Working document. February 2018.



Biggest challenges in facility data analysis

Key highlights

The workshop focused mainly on the adaptation of the World Health Organization Data Quality & analysis modules for health facility data analysis, which culminated to the production of Health facility data quality dashboard based on each participating country. The participants used routine data collected through the DHIS2 system and produced data quality dashboard, prepared annotated graphs and presented posters generated from the data quality tool. The country posters were assessed by all participants and facilitators and rated to identify the best three. Kenya poster was ranked number one, Mozambique was ranked second and Rwanda third. Members of the winning posters were awarded certificates to recognize the quality of their products together with a symbolic award/gift.



Participants and facilitators of the first ESA health facility analysis workshop – Naivasha, Kenya November 27-30th, 2018

The facilitators' team is summarizing findings from the country analyses in a short journal article to be published in the coming months. The team will also work on improving the data quality dashboard based

on feedback received during the workshop as a similar workshop will be organized for West and Central Africa countries in 2019.

Workshop evaluation by participants

Participants were asked to evaluate each session as well as the workshop overall. The policy relevance of the workshop was overwhelmingly rated either high or very highly by the participants. The majority of participants (90%) found the technical level of the workshop 'just right' and 10% rated as too hard. In addition, the overall level of facilitation in this workshop was rated 'good' by 73% of the participants and 'very good' by 18% and the remaining 9% rated it 'average'.

Logistics were widely considered strong, in particular the venue of the workshop was much appreciated. Few suggestions were noted, essentially on the need to provide more time for exercises and work groups in future.

Suggestion for improving the analysis workshop:



Appendices

Appendix 1 List of participants

Country	Name participant	Institution
Burundi	Dr Jean Marie Ntibazomumpa	Ministry of Health
Burundi	Dr Joël Nibogora	Ministry of Health
Burundi	Dr Prosper Niyongabo	National Institute of Public Health for Research and Training
Ethiopia	Dr. Wubegzier Mekonnen Ayele	School of Public Health, Addis Ababa University
Kenya	Dr Anne Khasakhala	Population Studies and Research Institute, University of Nairobi
Kenya	Dr Anthony Ngugi	Aga Khan University
Kenya	Dr Helen Kiarie	Ministry of Health
Kenya	Valeria Makory	Ministry of Health
Malawi	Simeon Yosefe	Ministry of Health
Malawi	Golden Chanansi	Ministry of Health
Malawi	Kondwani Chavula	Save the children
Malawi	Monica Patricia Malata	University of Malawi, College of Medicine
Mozambique	Gerito Augusto	Institute of Health Sciences
Mozambique	Dr. Cesarino Tivane	Ministry of Health
Mozambique	Dr. Catarina Barrula	Ministry of Health
Mozambique	Dr. Cláudio Muianga	WHO
Tanzania	Josephine Shabani	Ifakara Health Institute
Tanzania	Dhamira Mongi	Ministry of Health
Tanzania	Prisca Jackson	Ministry of Health
Tanzania	Mr. David Edward Lenga	Ministry of Health
Tanzania	Daudi Simba	Muhimbili University of Health and Allied Sciences
Zambia	Elizabeth Mwafuluka	Ministry of Health
Zambia	Mbonyiwe Jojo	Ministry of Health
Zambia	Ms Choolwe Jacobs	School of Medicine, Department Public Health, University of Zambia
Uganda	Geraldine Agiraembabazi	School of Public Health, Makerere University
Uganda	Paul Mubiri	School of Public Health, Makerere University
Uganda	Jimmy Ogwal	Ministry of Health
Uganda	Stephen Akena Bwoye	Ministry of Health
Zimbabwe	Dr. Rugare Abigail Kangwende	Ministry of Health
Zimbabwe	Mr. Lloyd Machacha	Ministry of Health
Zimbabwe	Vasco Chikwasha	College of Health Sciences, University of Zimbabwe
Botswana	Mooketsi M. Molefi	University of Botswana Faculty of Medicine
Botswana	Judith Letebele	Ministry of Health
Botswana	Balekane Sitibi	Ministry of Health
South Sudan	Augustino Ting Mayai	Sudd Institute
South Sudan	Victor Misaka	Ministry of Health
South Sudan	Edward Ladu	Ministry of Health
Lesotho	Masalemone Mokone	Ministry of Health
Lesotho	Lebohang Rantsatsi	Ministry of Health
South Africa	Dr. Innocent Maposa	Faculty of Health Sciences, Wits School of Public Health
South Africa	Mamothena Carol Mothupi	Public Health at the University of the Western Cape
Rwanda	Pacifique Mukashema	Ministry of Health
Rwanda	Ntawuyirusha Emmanuel	Ministry of Health
Eritrea	Amanuel Kifle	Ministry of Health

Eswatini	Mr Sibusiso Charles Mamba	Ministry of Health
Namibia	Mr. Ezekiel Muyenga KAMBONGI	Ministry of Health
Namibia	Mr. Matheus Shiindi	Ministry of Health
DR Congo	Espoir Bwenge Malembaka	Université Catholique de Bukavu Ecole Régionale de Santé Publique
DR Congo	Robert Banywesize	Ministry of Health South Kivu
Kenya	COSMAS, Leonard	WHO

Appendix 2 List of facilitators

Name	Country	Institution
Cheikh Faye	Kenya	APHRC
Gershim Asiki	Kenya	APHRC
Martin K. Mutua	Kenya	APHRC
Candy Day	South Africa	Health System Trust
Abdoulaye Maiga	USA	JHU
Safia Jiwani	USA	JHU
Dessalegn Melesse	Canada	U. Manitoba
Ties Boerma	Canada	U. Manitoba
Tyler Porth	USA	UNICEF
Chelsea Maria TAYLOR	Geneva	WHO
Elisabeth Katwan	Geneva	WHO
Bob Pond	USA	WHO Consultant
Claudious Chikhozo	Kenya	APHRC
Administrative and IT support		
Corretta Tira	Kenya	APHRC
Paul Odero	Kenya	APHRC

Appendix 3 Workshop agenda

Day 1	Tuesday, 27 November	Moderator: Cheikh Faye (APHRC)
8:30	Registration	
9:00	Session 1: Opening and General introduction of WHO DQ & analysis modules for health facility data analysis	
	Welcome and introductions	Leonard Cosmas (WHO), Ties Boerma (Countdown), Tyler Porth (UNICEF), Claudious Chikozho (APHRC)
	Purpose and methods of the workshop	Ties Boerma (Countdown)
	Survey of current practices in countries including experiences with DQ modules	Interactive polling with all participants
	WHO data standard for routine data: definitions, indicators, system of modules for data quality, analysis and interpretation	Bob Pond (consultant to WHO)
	Data quality assessment and analysis within DHIS2	continued
11:00	<i>Coffee / tea break</i>	
11:30	Session 2: Health facility data quality dashboard	
	Introduction of the methods and outputs	Ties Boerma
	Country data analysis: spreadsheets and uploading country data <ul style="list-style-type: none"> - Adjustment for incomplete reporting - DQ metrics for reported events (numerators) computation and presentation - Assessment of denominators, DQ metrics and possible solutions - National and district level analyses 	Abdoulaye Maiga (Countdown – JHU)
13:00	<i>Lunch break</i>	
14:00	Exercise 1: develop data quality dashboard and graphics for national and subnational levels	Country teams
15:30	<i>Coffee / tea break</i>	
16:00	<i>Continued</i>	Country teams
17:00	Country analytical highlights (1): share best analysis and communication materials from health facility data (max. 4 minute / 4 slides) + discussion	Volunteer participants and facilitators
17:30	End day 1	
Day 2	Wednesday, November 28	Moderator: Chelsea Taylor (WHO)
	Session 2: Health facility data quality dashboard – continued	

8:30	Introduction: development of district component of facility data quality dashboard – methods, tools, outputs	Abdoulaye Maiga
8:45	Exercise 1: continued develop data quality dashboard and graphics for all districts or other subnational units	
10:30	Presentations by 2-3 countries of DQ dashboard and discussion	Country participants
11:00	<i>Coffee/ tea break</i>	
11:30	Session 3: Analysis and presentation of access/coverage/quality indicators from health facility data	
11:30	Introduction of the methods, outputs and tools	
	1: Comparative analysis, presentation and interpretation of survey and facility-based statistics	Tyler Porth / Chelsea Taylor
	2: Computation and presentation of populations not utilizing services	Safia Jiwani
	3: Computation of indexes, methods and interpretation	Dessalegn Melesse
	4: Stratified analyses and presentation of district results and rankings	Candy Day
	5: Private sector and health facility data analysis	Ties Boerma
12:30	<i>Lunch break</i>	
14:00	Exercise 2: assessment and improvement of denominators for coverage indicators; development of access – coverage - quality dashboard for UHC; national and district levels; using facility and survey data	Country team work
16:00	<i>Coffee / tea break</i>	
16:30	Continued exercise 2	
17:00	Country analytical highlights (2): share best analysis and communication materials from health facility data (4 minute / 4 slides)	Volunteer participants and facilitators
17:30	End day 2	
19:00	<i>Reception & dinner at Enashipai</i>	

Day 3	Thursday, 29 November	Moderator: Cheikh Faye (APHRC)
8:30	Continuation coverage analyses and preparation poster session	Country teams
11:00	<i>Coffee / tea break</i>	
11:30	Poster assessments, Poster voting and award	All
12:30	Selected short country presentation on analyses and communication of health facility data analyses on access / coverage / quality of interventions	Winners of the poster assessment
13:00	<i>Lunch break</i>	

14:00	Session 4 and 5: Mortality and morbidity statistics from facility data	
14:00	Introduction of methods, outputs and tools: morbidity and mortality data quality dashboard	Gershim Asiki (APHRC) & Ties Boerma
	Introduction of indicators, methods, outputs and tools: <ul style="list-style-type: none"> - Garbage codes - Regrouping causes - age-sex patterns, levels and trends, population rates, case fatality rates in institutions, time trends, - Comparison with burden of disease studies 	Dessalegn Melesse (UM) & Ties Boerma
14:45	Exercise 4 / 5: <ul style="list-style-type: none"> - Computation of coverage deaths by health facilities - country data analysis – mortality and morbidity data quality dashboard, including garbage code estimation - country data analysis: mortality and morbidity statistics dashboard, computation, interpretation and presentation of results 	Country teams
15:30	Coffee / tea break	
16:00	Continued	
17:00	Country analytical highlights (3): share best analysis and communication materials from health facility data	Volunteer participants and facilitators
17:30	End day 3	

Day 4	Friday, 30 November	Moderator:
8:30	Maternal mortality, early neonatal mortality and stillbirths Introduction of methods, outputs, tools	Ties Boerma
9:00	Continuation of Exercise 4/5	
10:30	<i>Coffee/ tea break</i>	
11:00	Continuation of exercise and preparation of poster session	Country teams
12:30	Lunch break	
13:30	Assessment of posters - awards	All
14:30	Selected short country presentation on analysis and communication of health facility data on mortality and morbidity	Winners of the poster assessment
15:00	Synthesis presentation	Facilitators
15:15	Way forward and evaluation of workshop	All
15:30	<i>Closure</i>	