# POLICY BRIEF

Integrated Data Collection and Reporting from the Private Sector and Social Behaviour Change Communication Interventions Lessons from Malaria Projects in Tanzania





## CONTENTS



Integrated Data Collection and Reporting from the Private Sector and Social Behaviour Change Communication Interventions – <u>Lessons from Malaria Projects in</u> Tanzania

### **Executive Summary**

There is evidence that nearly 30% of households (mainly women and children) in Tanzania access healthcare services for acute illnesses from the over 9,000 Accredited Drug Dispensing Outlets (ADDOs) scattered all over the country [1]. Autonomous Laboratories (Auto Labs) account for more than 40% of all laboratories in the country. School Health Programmes (SHPs), though only active in 500 schools now, would potentially be expanded to more than 33,000 primary schools in the country. Unarguably, this makes the ADDOs, Auto Labs, SHPs, and Social Behaviour Change Communication (SBCC) activities significant sources of health data. Nevertheless, health data from these sources are neither formally collected, recorded nor part of the National Health Management Information System (HMIS). Exclusion of such critical data from the national HMIS undermines completeness of the database and renders the quality of decisions made based on the available health data sub-optimal [2]. Given the importance of quality health data for national and sub-national decision making, this omission is critical and requires viable and sustainable solutions in the interest of time.

Outcomes of six (6) malaria projects implemented in twelve (12) regions of Tanzania Mainland (Figure 1) provide empirical evidence that this omission can and should be overcome by a national-wide roll-out of the already tested Private Sector Integrated Surveillance System (ISS). ISS is a cost-effective and user-friendly web-based system. It is interoperable with the District Health Information System (DHIS2) and has Unstructured Supplementary Service Data (USSD) capabilities for use of mobile telephone services. The ISS has been developed by experts from the University of Dar Es Salaam (UDSM) and the e-Government Authority (e-GA). The System has been successfully piloted by 4,158 entities including 3,420 ADDOs, 82 Auto Labs, 500 schools and 156 communities in twelve regions of the Tanzania Mainland. Sixty-seven percent of the entities (i.e. 2,805) are from four (4) malaria projects supported by Comic Relief and GlaxoSmithKline (Comic Relief & GSK) in eight (8) regions. The projects are implemented by the Association of Private Health Facilities in Tanzania (APHFTA), Clinton Health Access Initiatives (CHAI), Tanzania Communication and Development Center (TCDC) and T-MARC Tanzania.





DFID funded Malaria Project Comic Relief & GSK funded Malaria Project USAID funded Malaria Project There has been significant donor support for the ISS. Fifteen percent of the 4158 entities where the ISS was piloted were from malaria projects funded by the Department for International Development (DFID) and implemented by CHAI. Eighteen percent of these entities were from malaria projects financed by USAID and implemented by the Sustaining Health Outcomes through Private Sector Plus (SHOPS Plus). Health sector stakeholders from both national and sub-national levels have expressed interest in adopting ISS for health data collection and reporting.

Given the evidence outlined in this paper on the significance of the missing key private sector and SBCC data from the DHIS2, and the successful roll-out of the Private Sector ISS in 12 regions of Mainland Tanzania, we recommend its integration into the DHIS2. This would increase visibility of the Private Health Sector data, enhance overall quality of health information, and facilitate evidence-based decision making at all levels of the health system.



## Problem, Scope and Rationale for Action

#### The Problem

Significant data from some Private Healthcare Providers (i.e. ADDOs, Auto Labs, School Health Programmes (SHPs) and Social Behaviour Change Communication (SBCC) interventions) are not efficiently and effectively collected. They do not form part of the National Health Management Information System (HMIS) and are consequently not adequately utilized at both national and sub-national levels for decision making.

#### Scope of the Problem

While data systems have improved in Tanzania over the years, including the introduction of the District Health Information System 2 (DHIS2), data quality audits conducted by a variety of programmes and funders have highlighted concerns about the quality of the data collected through the routine systems [2]. Data collection and use do not always take place at all levels of the health system [3]. As observed back in 2007, the National HMIS still does not provide data of sufficient completeness, timeliness, and quality, despite significant achievements [1]. One of the reasons for insufficient completeness of the National HMIS data is exclusion of data from some Private Health Providers and from SBCC activities.

Even though more than 30% of community members (especially women and children) access healthcare services for acute illnesses from the more than 9,000 ADDOs in the country [5], data from these facilities, Auto Labs, SHPs<sup>1</sup> and SBCC<sup>2</sup> activities were completely excluded from the DHIS2 until recently. Consequently, there is no formal architecture for systematic data collection, recording and reporting for them.



Data from malaria intervention projects in eight (8) regions in Tanzania, supported by Comic Relief & GSK and implemented by four (4) Non-State actors<sup>3</sup>, reiterate the significance of this omission. They indicate that approximately 35% of the clients visiting ADDOs for drugs are either confirmed or presumptive malaria cases though only 10% of them usually have a precription from a health facility or tested for malaria. Furthermore, SBCC data from the communities and schools show that approximatelly 40% of the community members do not sleep in treated mosquito nets, 20% are not knowledgeable on malaria prevention strategies and only 65% seek propt treatment upon onset of malaria symptioms. Had all this information been tapped and used for decision making, more informed planning at national and sub-national levels would be done leading to a better health outputs.

#### Rationale for Action

Weak service delivery reporting from the private sector coupled with lack of report-back from the public sector is contributing to weak dialogue and distrust between public and private sector providers [6]. Unregulated private providers do not report into the national HMIS. The need for timely collection and reporting of health data from private health sector players in a cost-effective manner remains an overdue policy element worth addressing now.

At the national Stakeholders' buy-in meeting<sup>4</sup> on the designed Private Sector ISS held on 21st February 2020 in Dar Es Salaam, all stakeholders recommended the adoption of the Private Sector ISS by the Government to harness health data from the ADDOs, Auto Labs, SHPs and SBBC activities and public health interventions. Studies on similar cases also show that disease-specific surveillance systems are a model for integrating the private sector into reporting [5].

<sup>&</sup>lt;sup>1</sup> Examples: a) % of school children and/ or teachers who participate in each disease-specific intervention; b) Number of schools participating in each disease-specific intervention.

<sup>&</sup>lt;sup>2</sup> Number of community members who access health messages through a certain medium of communication.

<sup>&</sup>lt;sup>3</sup> APHFTA, CHAI, TCDC and T-MARC Tanzania

The National Malaria Control Programme (NMCP) is so pleased with innovation that is Comic Relief and GlaxoSmithKline (CR & GSK) grantees have come up with a designed intergrated surveillance system that will be oriented in this meeting. The product is well aligned with the NMCP's current strategy as it has upgraded surveillance to become a core intervention together with malaria case management and vector control. Previously, surveillance system was recognized as supporting intervention

**Source**: Dr. Samwel Nhinga, NMCP Deputy Programme Manager, National Stakeholders Buy-In Meeting Held In Dar Es Salaam on 21st February 2020.

## **Proposed Intervention**

#### Background and Current Status of the National HMIS

The plan to have integrated HMIS in Tanzania dates to 2007 when the 'Monitoring and Evaluation Strengthening Initiative' involving MoHCDGEC, UDSM, University of Oslo (UiO) and other partners started. The efforts resulted in a paper-based system (Mfumo wa Taarifa za Uendeshaji Huduma za Afya – MTUHA) with a World Health Organization (WHO)-endorsed open-source, web-based HMIS – the DHIS2. Since then the system has been upgraded in phases to meet demand of health managers, implementers, designers, and decision-makers. By 2013, the DHIS2 system had been rolled out to all regions and associated districts in Tanzania Mainland to capture data from all public health facilities, private health facilities and all major vertical programs such as Malaria, Tuberculosis/Leprosy, Reproductive Child Health (RCH), and HIV/AIDS. The DHIS2 platform allows data warehousing, visualization and the possibility of users and policymakers to generate analyses from data in real-time. It also allows interfacing with many technologies including the opportunity to report by Short Message Service (SMS) via phones. The new DHIS2 Android App allows offline data capture across all DHIS2 data modules [7]. However, despite its increased scope over the years, the DHIS2 System still does not capture health data from ADDOs, Auto Labs, SHPs and SBCC activities in schools and communities. Consequently, data from these segments of the health system are not adequately collected, recorded, reported, and analyzed to inform decision making at all levels of the HMIS architecture.

<sup>&</sup>lt;sup>4</sup> The Meeting was attended by National Malaria Control Program (NMCP) - Deputy Program Manager, President's Office – Rural Administration and Local Government (PO-RALG) - Ag. Assistant Director for Health Section, NMCP - Head of Malaria Case Management, Head of SBCC & Program officer), University of Dar-es-salaam (UDSM) - Systems developer, T-MARC (Project manager), African Leaders Malaria Alliance (ALMA) - Administrator & Program Associate, Association of Private Health Facilities in Tanzania (APHFTA) - Health Coordinator, Tanzania Communication and Development Center (TCDC) - M&E officer, Clinton Health Access Initiative (CHAI) - Maria Program Manager & Program Officer. Source: Minutes shared by CHAI

#### Significance of the Excluded Data

These excluded health sector players make a significant contribution to the sector. For instance, ADDOs are the principal source of medicines in Tanzania and an important part of a multi-faceted health care system, with more than 30% of household members with acute illness seeking care from ADDOs [8]. Non-inclusion of health data from ADDOs, for instance, would therefore have significant implications on the data completeness, and consequently the National HMIS data quality [9]. Unfortunately, neither the soon-to-be ending Health Sector Strategic Plan (HSSP IV) nor the Tanzania Digital Health Strategy 2019–2024 specifically encompass mechanisms for capturing data from these outlying important sources. Nevertheless, discussions on the need for their fast-tracked inclusion have been high on the agenda of various health sector stakeholders' meetings including the National Malarial Control Program (NMCP), SHOP Plus, and the National Tuberculosis and Leprosy Program (NTLP). Should redress of this matter be left to follow the typical policy reform path, valuable time is likely to elapse before it is fixed, at the expense of the quality of life of Tanzanians.

#### Private Sector ISS Functionality and Value Proposition

Fast-tracked policy redress of the HSSP IV to include mechanisms to capture private sector source data, is feasible and crucial. This is one common evidence-based recommendation from each of the now ending four (4) malaria projects funded by Comic Relief & GSK. The projects are implemented by APHFTA, CHAI, T-MARC and TCDC in Geita, Shinyanga, Simiyu, Kigoma, Ruvuma, Rukwa, Njombe and Iringa regions. Similar recommendations were previously echoed by malaria projects implemented by SHOPS Plus in Dodoma, Mwanza, Kigoma and Mtwara regions. Results from all the projects clearly pinpoint that data from ADDOs, Auto Labs, SHPs and SBCC interventions can be collected in a timely and cost-effective manner and reported in DHIS2 through Private Sector ISS.

The proposed system was initially developed by CHAI in collaboration with experts from UDSM and e-GA in 2017. The Private Sector ISS is a web-based system, with a reporting template compatible and interfaced with DHIS2 platform and using Unstructured Supplementary Service Data (USSD) features<sup>5</sup>. The USSD features enable the reporting template to be uploaded and used by ADDOs, Auto Labs, schools, and community representatives through a mobile handset.

The proposed system has been successfully rolled out to 4,158 entities including 3,420 ADDOs, 82 Auto Labs, 500 schools and 156 communities in twelve regions (46% of all regions) of Tanzania Mainland (Table 1). CHAI's ISS Project Learning Initiative conducted in 2018 to gather perceptions of stakeholders, indicated that the proposed system is affordable, user-friendly, efficient, and interoperable with DHIS2. The System could also be scaled up for use with health interventions other than Malaria including TB, Family Planning, Early Child illnesses, Covid – 19 and the Neglected Tropical Diseases (NTDs).

<sup>&</sup>lt;sup>5</sup> A communication service controlled by mobile financial network operators. The Use of Private Sector ISS through USSD does not need internet connection.



## **Policy Recommendations**

Given the evidence outlined in this paper of the significance of the missing key private sector and SBCC data from the DHIS2, and the successful roll-out of the Private Sector ISS in 12 regions of Mainland Tanzania, we recommend its integration into the DHIS2. This would increase visibility of the Private Health Sector data, enhance overall quality of health information, and facilitate evidence-based decision making at all levels of the health system. More specifically, it is recommended that the government and stakeholders may consider to:

S/No.	Recommendation	Responsible Organ	Expected Result
1	Formulate a policy to enable use of the Private Sector Integrated Surveillance System (ISS) in capturing missing health data from the Private Health Sector, School Health Programs (SHPs) and Social Behaviour Change Communication (SBCC) Activities.	Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC)and Social Behaviour Change Communication (SBCC) Activities.	Optimal strategic health sector decisions resulting in improved quality of healthcare services and ultimately, improved quality of life of Tanzanians.
2	Provide strategic support, guidance, coordination, follow up on enforcement of formulated policy by mainstreaming its use at the sub-national level (i.e. at Regional Secretariats (RSs) and Local Government Authorities (LGAs)).	President's Office Regional Administration and Local Government (PO-RALG)	More representative healthcare data in the DHIS2 and Increased visibility of the Private Health Sector, SHP and SBCC contribution.
3	Include Private Sector ISS module in the school curriculum <sup>6</sup> and institutionalize SHP data reporting into District Health Information System 2 (DHIS2).	Ministry of Education, Science and Technology (MoEST)	Optimized school health decisions.
4	Provide guidance to the Human Resources for Health (HRH) and schoolteachers through Regional and Council Health Management Teams (R/CHMTs) to supervise collection, recording and reporting of quality data private sector facilities and SBCC Activities to DHIS2	RSs and LGAs	Technical link created between the Private Sector ISS and the National HMIS/DHIS2
5	Advocate for uptake of the Private Sector ISS and implement improved routine health data gathering and reporting at facility, community, district, and regional levels.	Health Sector Development Partners (DPs)/Projects implementers	Enhanced programming and result-based health project designing.

<sup>&</sup>lt;sup>6</sup> In line with Strategic initiative No.3 under Strategic Priority No.6 of the Tanzania Digital Health Strategy 2019 - 2024

S/No.	Recommendation	Responsible Organ	Expected Result
6	Ensure compliance with regulations/guidelines for data collection, record keeping, and reporting to DHIS2.	Owners of private health facilities, schools, CHWs and CHVs.	Quality health data collected, recorded, and reported efficiently and efficiently
7	Support operation and upgrade of the system.	System Developers and Vendors	Private Sector ISS Sustained
8	Translate the envisaged ISS policy into Standard Operating Procedures (SOPs) including mandating ADDOs and Auto Labs to keep data registers in their workplaces for capturing respective data sets. Institutionalize training on the proposed Private Sector ISS model in the curriculum for ADDOs and Auto Labs, respectively.	Pharmacy Council of Tanzania, Health Laboratory Practitioners Council (HLPC) and Tanzania Medicine and Medical Devices Authority (TMDA)	Improved quality of healthcare services.
9	Facilitate the roll-out process through technical assistance, capacity building, sharing of experiences, funding, and advocacy.	Director of Preventive Services (DPS)	Mutual health care objectives at national and global levels achieved

## Conclusion

There is empirical evidence that data from ADDOs, Auto Labs, SHPs and SBCC interventions are important for improved quality of health data. This data is currently not part of the national HMIS. Countrywide roll-out of the Private Sector ISS is a viable and sustainable approach to solve this problem and improve overall quality of health through evidence-based decision-making.



- 1 Bennett, A., Avanceña, A.L.V., Wegbreit, J. et al. Engaging the private sector in malaria surveillance: a review of strategies and recommendations for elimination settings. Malar J 16, 252 (2017). https://doi.org/10.1186/s12936-017-1901-1
- 2 The National Health Policy, 2017
- 3 MoHCDGEC. 2016. National Guidelines for Health Data Quality Assessment.
- 4 Msumi, M.M. An Overview of eHealth Regulations in Tanzania. Datenschutz Datensich 42, 373–375 (2018). https://doi.org/10.1007/s11623-018-0959-4
- 5 MoHCDGEC. 2019. Tanzania Digital Health Strategy July 2019 June 2024
- 6 World Bank. 2013. Private Health Sector Assessment in Tanzania. World Bank Study. Washington, DC: World Bank. doi:10.1596/978-1-4648-0040-5. License: Creative Commons Attribution CC BY 3.0
- 7 Somi, G., Matee, M. I., Wengaa, D. J., Darcy, N., & Perera, S. (2017). Analysis of data dissemination and use practices in the health sector in Tanzania: Results of desk review and interviews with key stakeholders. JOURNAL OF HEALTH INFORMATICS IN AFRICA, 4(1), 79-89. https://doi.org/10.12856/JHIA-2017-v4-i1-168
- 8 About DHIS2. Retrieved from http://www.dhis2.org

## **AUTHORS CONTACT LIST**



Plot No. 01, Lumumba/Makamba Street, P.O. Box 13234 Dar Es Salaam, Tanzania Web:<u>www.aphfta.org</u> Tet. No.: +255 2**2**184508/2184667



Plot No 215/217, Block D, Kuringa Drive P.O. Box 63266, Dar Es Salaam, Tanzania Web:<u>www.tmarc.or.tz</u> Tel. No.: +255 22 2650748



Mikocheni B, Block B, Plot No. 22, House No. MKC/MCB/993. P.O.Box 105170, Dar Es Salaam, Tanzania Web:<u>www.tcdctz.org</u>



3rd Floor, Skyway Building, Ohio/Sokoine Drive,P.O. Box 77277,Dar Es Salaam, Tanzania,Web:www.clintonhealthaccess.org







