



# Enabling Supportive Supervision to Improve Health Outcomes in Malawi

CASE STUDY



# OVERVIEW

The digital integrated supportive supervision (ISS) is a suite of digital supervision checklists that the Ministry of Health and Population (MoHP) in Malawi is using to supervise health facilities and programs. The tool was developed by Dimagi in 2018, working as a technical partner on the USAID-supported Organized Network of Services for Everyone's (ONSE) Health Activity. It is used by supervisors from district health management teams (DHMTs), and managers from zonal and national levels of the MoHP on a quarterly basis as a standard supervision, monitoring, oversight, and decision-making tool.

Each of the 29 districts in Malawi are empowered with 5 tablets preloaded with the digital ISS app built on the CommCare platform. Supervisors use the tablets to conduct quarterly supervision across government health facilities, Christian Health Association of Malawi (CHAM) facilities, and selected private clinics. Like all other CommCare-based applications, the digital ISS app has off-line capabilities and supervisors only sync with the server to submit supervision data when they have connectivity. The data immediately becomes available to policy level decision makers and stakeholders via an online dashboard where they are able to see performance on selected key indicators across programs and geographies. This increased visibility has greatly empowered decision makers such as the parent department for Quality Management to be on top of program performance and service quality even in remote areas. The integration with DHIS2 has eliminated duplication in data collection between DHIS2 and this national supervision tool built on CommCare. Having supported the transition to local ownership and technical capacity transfer in hosting and application building, Dimagi has ensured that the MoHP has the skills needed to adapt the ISS to meet emerging needs in the future and sustain it as a government owned and managed tool.

## SUMMARY



### LOCATION

Malawi



### SECTOR

Health Systems Strengthening  
/cross cutting all programs.



### PARTNERS

MoHP (Principal owner), MSH (Prime/ONSE), USAID (Funder),  
The Bill and Melinda Gates Foundation (funded technical integration), Options Project (scale up to non-ONSE supported districts).



### FEATURES

Case Management; Decision Support; Action management; Visualization



### NUMBER OF CLIENTS

[300+]

## PROBLEM

Supervision is an essential enabler of management. Oversight tools are necessary for any organization to ensure the quality of service delivery. Despite having paper supervision protocols since early 2000, supervision of health facilities and quality program/ service delivery has always been a big problem in Malawi. The lack of visibility into data that is associated with paper-based tools meant that decision makers were not adequately in control over the program for which they were responsible and accountable. Inability to efficiently document and track action items meant that key barriers and bottlenecks to facilities' readiness to provide the expected quality of care remained largely unresolved and forgotten. It was impossible to drive systematic and progressive continuous performance improvement due to poor visibility and tracking. Additionally, the high cost of printing paper supervision checklists created a huge burden on the ministry budget and operational headache for the various health departments involved.

Cumulatively, the effects of these supervision challenges for Malawi's national program created a heavy burden on system performance and budget.



# SOLUTION

The USAID funded ONSE Health Activity provided a huge opportunity to digitize and revolutionize the manner in which supportive supervision was being conducted and its data accessed and utilized.

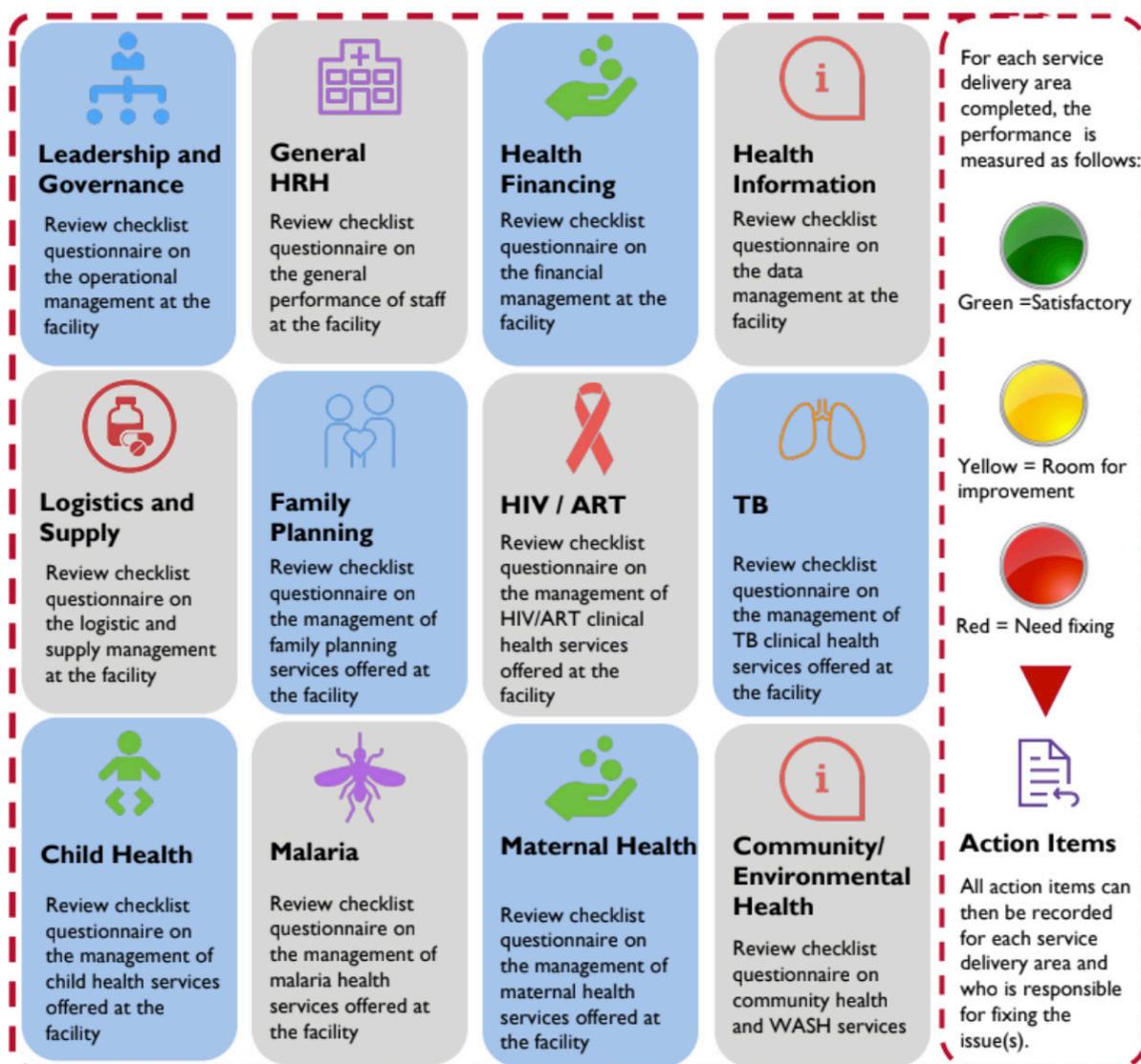
Working with MSH/ONSE and under MoHP/Quality Management Department leadership, Dimagi supported the scoping, technical development, deployment and transition to local ownership of the digital ISS solution between 2018 - mid 2022. The digitization of the ISS on the CommCare platform eliminated most of the barriers related to efficient conduct of supportive supervision and utilization of data cited above. Supervision became more efficient and data more visible and easily accessible to stakeholders. This has created more opportunities for enhancing quality and effectiveness of decision making. CommCare's versatility to support creation, updating, and closure of action items has enhanced the MoHP's efficiency by allowing them to systematically capture action items that require follow up through to closure, enabling them to address bottlenecks that affect facility readiness and provide expected services and quality of care.

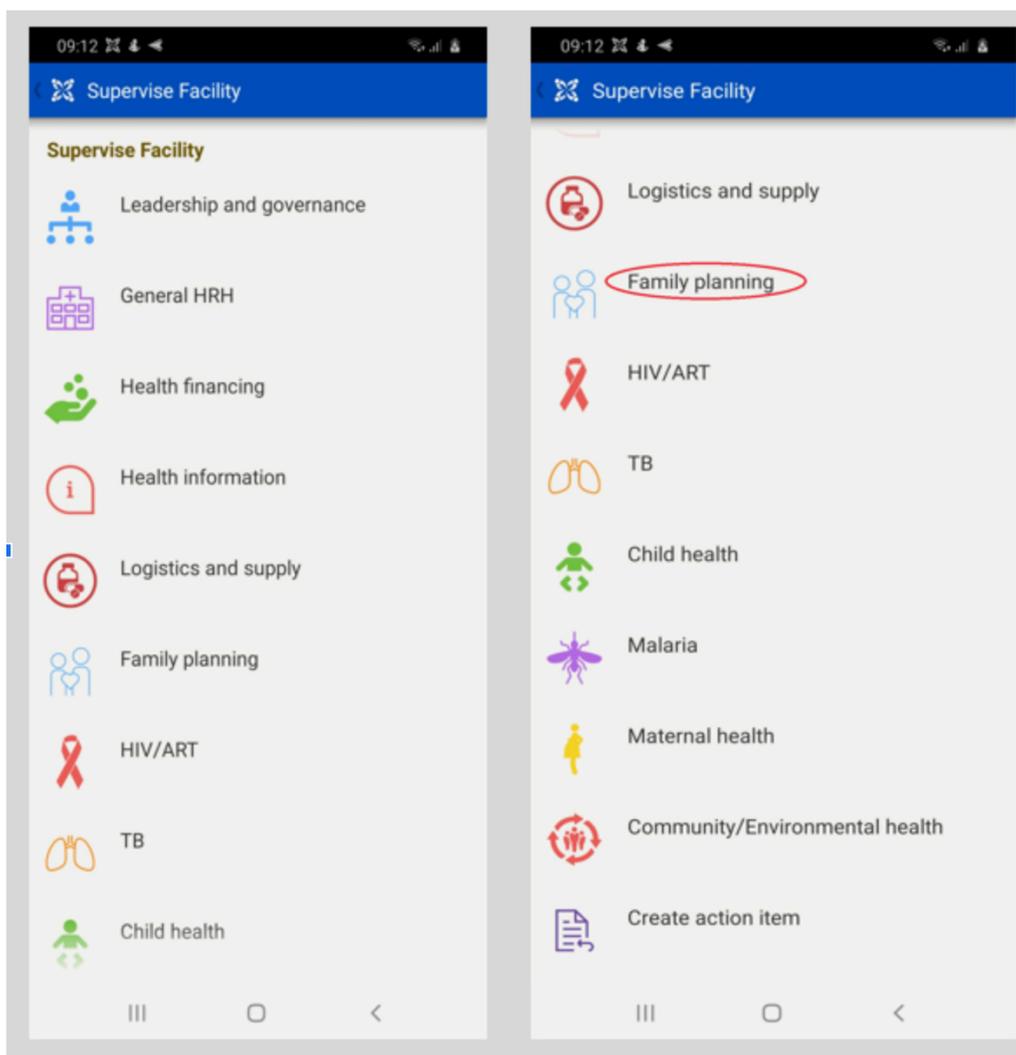
Eliminating these bottlenecks in the conduct, documentation and follow up of supportive supervision has unlocked multiple benefits along the way. Decision makers are now able to access supervision data from any location via an online dashboard. The increased visibility has made monitoring and accountability very easy thereby enhancing managerial roles, as any "hold ups" in the system are clearly visible to all for improvement action or support. Dimagi's digitization of the ISS function has empowered decision makers across all levels with improved visibility into performance data, meaning that they are now able to hold the different players in the system accountable for performance of the health system.



# APP OVERVIEW

The digital ISS tool consists of 12 different modules integrated on the same app, each module representing a particular supervision area. The picture below presents an overview of the twelve different supervision areas on the ISS app.



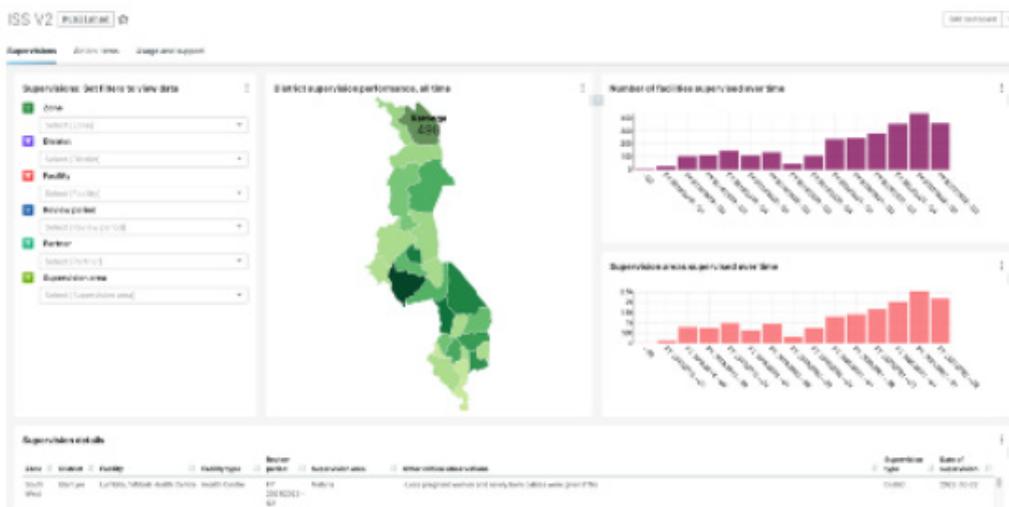


Supervision for each of the supervision areas is guided by an MoHP approved protocol/checklist which takes supervisors step-by-step through questions that aim to assess status of the “desired state for the module” in terms of readiness, availability of necessary health commodities to treat a given condition, etc. The responses that are captured represent the current state of the health system for that particular module. This “current state” may be in line with the desired state, meaning the system at that module level is working to expectations, or current state may be below expected state, implying there is a gap that needs to be addressed. When a response captured shows an unsatisfactory current state relative to what is desired, the app automatically flags this as a yellow or red, depending on extent/severity of the mismatch. This gap then calls for the creation of an action item that is needed to close the gap and move the situation toward the desired state where the facility is then able to provide the expected quality of service at the facility level.

# FEATURE HIGHLIGHT

## Data Visualization via Superset online dashboard

In order to enhance managerial visibility into data and accountability by all actors in their supervision roles, Dimagi developed an online dashboard using the open-source Apache Superset platform, which is integrated with the CommCare ISS application. Supervision data that is collected via the app is summarized in the dashboard to inform performance on specific indicators of interest to the MoHP on a continuous basis. A sample dashboard page is illustrated below:



Enhanced visibility into supervision data has improved MoHP and stakeholder monitoring and oversight of the supervision and program/facility performance. This has made it easier to target support (resources, managerial time, etc) to areas facing performance challenges for mentorship and improvement. By enhancing visibility into supervision data, MoHP managers at different levels have better information for decision making and are therefore more “in control” over their programs and health facilities. The screenshot above is a sample snapshot of a page on the dashboard, with data filtered according to preferences to inform percentage facility supervisions, distribution of supervisions across supervision areas for a particular time period, and flag facilities that have not been supervised in that period for management attention. The snapshot also shows different filter options, allowing decision makers to call up only that information that they need.

## IMPLEMENTATION

The current digital ISS is an improvement over its predecessor which was built on ODK under the then USAID-funded Support for Service Delivery Integration Project.

Implementation of the CommCare-based digital ISS tool started with a technical and functional review of the previous version that ran on the ODK platform. Based on observed pain points and what the MoHP desired the system to do, Dimagi re-built the digital ISS tool on the CommCare platform to leverage case management, integration, and other capabilities that come with the CommCare platform. Scoping, design, and initial version were done in collaboration with users across levels.

Deployment of v1 kickstarted with the MoHP training of trainers to build a local team that could immediately manage the national ISS roll out and champion early adoption and ownership across all levels. Dimagi supported the development of an institutionalization strategy to intentionally support mainstreaming of the digital ISS within the MoHP as a standard supervision and management tool. Two years before project closure, Dimagi supported the ONS and the MoHP with the transition to MoHP for long term sustainability of the digital ISS tool, including local hosting and technical capacity transfer in CommCare application building and server management skill areas. With the digital ISS under the management of the MoHP Digital Health Division, Dimagi is confident that this work has a great chance of being sustained into the future to continue to benefit district and national performance management and ongoing quality improvement.



# IMPACT

Prior to transitioning the digital ISS tool to the MoHP, the ONSE Project conducted field in-person interviews with selected primary users of the application at district and MoHP/QMD national decision maker levels. The goal was to understand and document user perspectives around some of the successes and value-addition from the digital ISS investments at their level.

User feedback indicates that the digital ISS has positively impacted the healthcare system at different levels in a number of ways:

- **Credible data for lobbying resource support:** Dowa District Hospital used supervision data from the ISS dashboard to successfully lobby for resources to fix some of the long-standing challenges in their health facilities.

*“The (digital ISS) tool has uncovered challenges that existed in surrounding health facilities and even [right] at Dowa district hospital itself. For example, the Chankhungu Health facility had waste management problems and there was no guardian shelter. Once these challenges were made visible to stakeholders via dashboard, the district health management team used this data to engage the surrounding community and members of parliament for the areas: these key stakeholders pooled resources together and helped address the problems. We now know how even the most remote health centers are performing in regards to delivery of essential services needed to save and improve lives. Our staff are now receiving the support they need to improve their performance, and improve health outcomes.”*

– Mercy Makaka, Dowa District Hospital Administrator, MOPH

*“Through the Community/Environmental Health module of the ISS, we identified waste management and lack of guardian shelter as some of the issues at facilities such as Chankhungu, Chisepo, Thonje, Chakhadza and Bowe. Thanks to the [digital ISS] tool, Chankhungu Health Center now has a guardian shelter, water problems have been solved and it now has proper waste management.”*

– Watson Kachigayo, Pharmacy Technician at Dowa District Hospital, MoHP

With actionable data now readily available through the digital ISS dashboard, Dowa has strategically leveraged this to lobby and tap support from local partners to fix its challenges.

- **Empowering managerial oversight and creating accountability over performance in a decentralized health service delivery system.**

The Quality Management Department (QMD), the “parent department” for the integrated supportive supervision and quality of care in the MoHP, sees the digital ISS far beyond supervision.,

*“The deployment of the digital ISS tool and dashboard has greatly empowered me as National ISS Coordinator to identify zones and districts that are lagging behind in facility supervision....and target follow up support more efficiently. I am now in a stronger position to manage (performance) than was the situation before we had the ISS dashboard...”*

– Dr. Malangizo Mbewe, Deputy Director and National ISS Coordinator in MoHP/QMD

With increasing demands for more accountability in a decentralized environment through the Ministry of Local Government, Dr. Mbewe flags additional benefits of the digital ISS investment:

*“As Quality Management Department (QMD), we have found the (online) ISS dashboard very handy in empowering our districts to show (verifiable) evidence of their performance in the health sector through the Local Government-led Accountability Programme. It has greatly enabled us to be objectively accountable and provide evidence of improvement over time to the Ministry of Local Government at the district level.”*

– Dr. Malangizo Mbewe, Deputy Director and National ISS Coordinator in MoHP/QMD



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